PROVINCIAL STANDARDS & GUIDELINES

BCRenal
Provincial Health Services Authority

Preparing for Hemodialysis Staffing Emergencies

A Companion Guide to the Ethical Framework for Dialysis Allocation

Created May 2022
Approved by BC Renal Emergency Management Committee

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Table of Contents

IMPORTANT INFORMATION

This BC Renal guideline/resource was developed to support equitable, best practice care for patients with chronic kidney disease living in BC. The guideline/resource promotes standardized practices and is intended to assist renal programs in providing care that is reflected in quality patient outcome measurements. Based on the best information available at the time of publication, this guideline/resource relies on evidence and avoids opinion-based statements where possible; refer to www.bcrenal.ca for the most recent version.

For information about the use and referencing of BC Renal provincial guidelines/resources, refer to http://www.bcrenal.ca/health-info.

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1.0 Introduction

Response plans help maintain patient continuity during a staffing emergency. The purpose of this guide is to support Health Authority Renal Programs (HARPs) in maintaining hemodialysis (HD) services when staffing levels are significantly depleted ("staffing emergency").

This guide is a companion to the Ethical Framework for Dialysis Allocation (2021) and utilizes the same four stages of contingency planning:

1. Conventional operations, Minor surge
2. Conventional operations, Moderate surge
3. Contingency operations, Major surge
4. Crisis Operations, Emergency triage status

2.0 Scope

This guide focuses on:

1. Strategies to optimize the utilization of staff during each stage of contingency planning; and
2. Practical tools to support the implementation of the strategies

This guide applies to in-centre and community dialysis hemodialysis units in BC.

3.0 Contingency Levels and Recommended Staffing Response

Table 1 utilizes the stages of contingency planning identified in the Ethical Framework for Dialysis Allocation and proposes an appropriate staffing response at each stage.

Table 1 includes:

- Stage of emergency planning as per the Ethical Framework for Dialysis Allocation (column 1)
- Description of each stage and recommended triage response as per the Ethical Framework for Dialysis Allocation (columns 2 and 3)
- Description, recommended actions and supporting resources of an appropriate staffing response at each stage (columns 4, 5 and 6).

[1] *www.bcrenal.ca/resource-gallery/Documents/Balancing_the_needs_of_acute_and_chronic_dialysis_patients-2021.pdf*

Table 1: Contingency Levels & Recommended Staffing Response

Stage	Hemodialysis Unit (as per Ethical Framework for Dialysis Allocation)		Unit Leadership Staffing Response		
	Description	Recommended Triage Response	Description	Recommended Actions	Supporting Resources
Stage 1: Conventional Operations, Minor Surge	All dialysis resources levels are fully intact. The hospital hemodialysis (HD) unit is functioning within usual bed capacity and adequate staffing levels.	• Disaster preparedness should be emphasized in HD units prior to an increased surge capacity. Patients should be aware of surge strategies well in advance. • Provide all patients with documents on emergency preparedness which should include diet and fluid plans. • Assess all patients for fitness for dialysis dose reduction to expand capacity • Prioritize Advance Care Planning discussions/serious illness and goals of care conversations to align care with patient goals and wishes. If emergency is pandemic related: • Consider cohorting positive inpatients out of the HD unit when possible. • Cohorting of positive patients within inpatient units NOT in critical care areas should be considered to optimize nursing ratios during off-ward dialysis beyond 1:1. • Consider moving positive dialysis patients to adjacent rooms or multi-bed rooms within units to allow for this.	Site can manage with current casuals and occasional overtime. No movement of staff on/off the unit ***Strategies:*** • Continue usual activities to preserve staffing complement • Develop/ update contingency plan for staffing emergencies ***Escalation:*** None.	**Usual activities:** • Fill vacancies • Advance hire lines (PRN) • Regularly offer/sponsor specialty renal education **Contingency planning for staffing emergencies:** • Develop/update plan for staffing emergencies • Develop/update materials to fast-track the orientation of (1) HD trained staff & (2) non-HD trained staff working elsewhere (within HA) • Identify/confirm activities that may be able to be deferred if staffing resources limited/ depleted (e.g., routine bloodwork, access flow surveillance, med reviews, mESAS) • Ensure key staff members are trained on emergency management module in PROMIS.	**HA:** • Senior leader(s) designated as responsible for reviewing current state, workforce trends and workforce planning • Physician leader(s) designated to oversee patient care decisions if staffing resources limited/ depleted • Educator(s) designated to support orientation/on-boarding. • Educator (s) to update unit orientation package • Identify a staff member (s) who will be responsible for mentoring/orienting/training new and redeployed staff. • PROMIS Learning Hub: https://learninghub.phsa.ca/Courses/20532/promis-4-emergency-planning • PROMIS Documentation: https://promis.phc.bc.ca/promis/manual/index.htm#!Documents/emergencymanagementplanning.htm

Stage	Hemodialysis Unit (as per Ethical Framework for Dialysis Allocation)		Unit Leadership Staffing Response		
	Description	Recommended Triage Response	Description	Recommended Actions	Supporting Resources
Stage 1: Conventional Operations, Minor Surge		• Work with dialysis vendors and off-site units to optimize resources, communication, and joint decision-making structures across organizations			**Provincial:** BCR Dialysis Workforce Strategy documents: • Provincial Guidelines for Renal Program Development • HD Interdisciplinary Team: Matching Skill Mix with Patient Care Needs BCR Helping in the Hemodialysis Unit - Information for Non-trained Hemodialysis Staff Priority Activities, Roles & Responsibilities Template: Preparing for a Hemodialysis Staffing Emergency Template BCR Patient Emergency Preparedness materials (booklet, wallet card, K resin patient information sheet)

Stage	Hemodialysis Unit (as per Ethical Framework for Dialysis Allocation)		Unit Leadership Staffing Response		
	Description	Recommended Triage Response	Description	Recommended Actions	Supporting Resources
Stage 2: Conventional Operations, Moderate Surge	All dialysis resource levels remain intact, but there is a possibility that staffing resources may become depleted.	• Continue to keep patients informed of Emergency Stage/Surge Level. • Identify patients currently dialyzing in-centre who can potentially dialyse in community units and facilitate transfer where possible. • Identify potential home dialysis patients and fast track training • Review and update Resuscitation Orders (Code Status/MOST/POLST) • Maximize the use of all CRRT machines in Critical Care areas. • Determine essential components of sufficient HD care. Consider deferring routine: blood work, access flow surveillance, medication reviews. • Determine capacity of nurse to support multiple patients at essential service levels. • Determine interdisciplinary supports available to assist in care. • Consider repatriating HD trained staff from pre-dialysis and transplant clinic-based service areas and how to provide refresher training. • Explore other roles in health care (included and excluded) and determine how they can support direct care.	• Site struggling to manage with current casuals & significant overtime • Adjustment of nurse/patient ratios due to insufficient staffing. ***Strategies:*** • Optimize use of HD staff • Redeploy HD trained staff working elsewhere (within HA) ***Escalation:*** • Notify HA EOC to alert team that impending staffing issues need escalation • Notify BC Renal (support@bcrenal.ca) to alert team that impending staffing issues need escalation • BC RENAL to bring Renal Emergency Task Group (ETG) together • Provide updates to HA EOC and BCR ETG • BC Renal to escalate to PHSA EOC, if needed	**Optimize use of HD staff:** • Adjust staff HD work schedules, where appropriate. No new leaves approved • Adjust patient HD schedules as needed • Cohort patients (e.g., beds vs chairs, stable vs unstable) • Transfer patients to other units, where feasible (within HA) **Redeploy HD trained staff working elsewhere:** • Identify staff with HD training working elsewhere with the potential to be reassigned (within HA) • Develop plan & timeline for above staff to be reassigned. Notify staff. Organize orientation/refresher training • Implement collaborative team model. Adjust staff/patient ratios. • Limit non-essential tasks, as appropriate (e.g., routine bloodwork, access flow surveillance, med reviews, mESAS)	**HA:** • Leader designated to oversee & address issues related to adaptations to care model. • Designated leader to escalate to Medical Director. • Appropriate reporting structure & support for reassigned staff (team-based lead in each pod, frequent huddles, etc.). • Extra SW support to assist patients with anxiety & address patient concerns **Provincial:** Refer to Stage 1 PLUS: BCR Sample Letter to patients re dialysis schedule (Appendix 1) BCR Care Delivery Models & Nurse/Patient Ratios during Staffing Emergencies (Appendix 2)

Stage	Hemodialysis Unit (as per Ethical Framework for Dialysis Allocation)		Unit Leadership Staffing Response		
	Description	Recommended Triage Response	Description	Recommended Actions	Supporting Resources

Stage 3: Contingency Operations, Major Surge	An increase in demand for dialysis services, beyond the normal capacity, yet still maintainable with changes to staff ratios and HD treatment duration.
	
	Each HD unit remains responsible for determining the most effective approach to manage the increased demand volumes.
		• Activate dialysis dose-reduction for long-term hemodialysis patients
		  • Consider 2 times a week hemodialysis for Category 1 patients.
		  • Consider reduced duration HD for Category 2 and 3 patients (may be facilitated by potassium resin binders and very low (K0 or K1) potassium dialysate baths)
		• Extend usual nurse patient ratio in ICU to acceptable and agreed upon staffing that includes ICU/HD RNs and renal technician. Outline strategies for urgent assistance if patient care needs change.
		• Consider increasing the utilization of PD urgent starts.
		• Proactively assess prognosis for long-term HD patients using the Charlson Comorbidity Index (CCI) in preparation for triage if Stage 4 Crisis is reached.
		• Increase nurse to patient ratio in hemodialysis unit and cohort stable patients to maximize ratio in a team-based approach.
		• Transfer long-term hemodialysis patients to other geographic regions with dialysis capacity.
			Site unable to manage with casuals, significant/ mandatory overtime, expanded nurse/patient ratios & reassigned HD-trained staff. Demand nearly overwhelming HA resources
			
			Strategies:
			• Optimize use of HD staff
			• Redeploy non-HD trained staff working elsewhere (within HA)
			
			Escalation:
			• Seek assistance from HA EOC &
			• Update & notify BCR Leadership (support@bcrenal.ca)
			• BC Renal ETG to work together with HARPs
				Optimize use of HD staff:
				• Adjust staff HD work schedules, where appropriate. Consider rescinding approved leaves
				• Adjust patient HD schedules as needed to accommodate frequency/dose reductions
				• Cohort patients (e.g., beds vs chairs, stable vs unstable)
				• Maximize CRRT machines in critical care areas
				• Transfer patients to other units, where feasible (within HA)
				
				Redeploy non-HD trained staff working elsewhere:
				• Identify non-HD trained staff working elsewhere with the potential to be reassigned
				• Develop plan & timeline for above staff to be reassigned. Notify staff. Organize orientation to (1) hemodialysis; & (2) HD unit
				• Implement functional team nursing. Adjust nurse-to-patient ratios.
				• Defer non-essential nursing and other care (e.g., routine bloodwork, access flow surveillance, med reviews, mESAS)
					HA: Refer to Stage 2.
					
					Provincial: Refer to Stage 2 PLUS: BCCNM Assigning & Delegating to Unregulated Care Providers
					
					Working with Limited Resources:
					• Webinar (NNPBC)
					• Message from Registrar & CEO: Working in a Pandemic (BCCNM)
					• Duty to Provide Care, section 7.0 (BCCNM)
					
					Moral Distress/Staff Supports:
					Employee and Family Assistance Program (EFAP) (offered by Homewood Health).
					• Counselling (virtual, face-to-face)
					• On-line resources/e-courses

Stage	Hemodialysis Unit (as per Ethical Framework for Dialysis Allocation)		Unit Leadership Staffing Response		
	Description	Recommended Triage Response	Description	Recommended Actions	Supporting Resources

Stage 4: Crisis Operations, *Emergency Triage Status*	A significant increase in demand for HD services which impacts care at a regional level.
	
	More patients are requiring services than available resources.
	
	The system is operating at a crisis surge level and the increase in demands that overwhelms the renal resources of an individual hospital and region.
		• Organize provincial response. A coordinated response at the regional network level is required.
		• At Stage 4, BC Renal Emergency Task Group (ETG) should be in a position to provide direction to ensure clinical and operational leads are prepared to invoke management strategies to determine alternate service delivery.
		• Increase the utilization of PD urgent starts.
		• Implement triage allocation framework.
		• Allocation of available dialysis resources determined by the triage team
			Site is unable to manage. Demands exceed HA resources. No further HA interventions possible. Provincial assistance required
			
			Strategy:
			• Seek assistance from BCR & provincial renal network.
			• Develop coordinated provincial response
			
			Escalation:
			HARP to update BC Renal ->BC Renal to update PROMIS emergency support team (stand-by) & PHSA EOC ->if needed, PHSA EOC to escalate to Health Emergency Coordination Centre (HECC) -HECC to escalate to MoH for assistance to organize provincial and/or federal support
				BC Renal:
				• Activate BCR ETG (BCR, Medical/Renal Directors + Others PRN)
				• Activate the provincial renal network to develop a provincial response. Involve regional Dialysis Tripartite Triage Assessment Team (DTATT) & PHSA EOC as needed
				• Provincial response may include redeployment of staff from other HAs, transfer patients between HAs, triaging of patients care needs etc. (as per the Dialysis Resource Allocation Framework).
				
				HAs, stage 3 PLUS:
				• Maintain contact with HA EOC
				• Implement provincial response:
				  • Orientate HD and non-HD trained staff reassigned from other HAs
				  • Transfer patients between HAs
				  • Triage patient care needs using the Dialysis Allocation Framework
					BC Renal:
					• Leader designated to coordinate the provincial response & monitor situation
					• Physician leader(s) designated to oversee patient care decisions
					• Plan & budget to support cross-HA movement of staff/patients (under development)
					• Union/labour relations framework for staff temporarily reassigned to another HA (under development).
					• Redeployment toolkit, including secondment agreement (under development)
					• Refer to Emergency Program Act (Government of BC)

4.0 Appendices

Appendix 1 - Patient Letter

Scheduling safe care for all patients is crucial to the coordination of dialysis care. As the situation evolves and the pressure on the system increases and decreases, changes to maintenance HD schedules need to be communicated to all patients. Decisions will be made depending on the patient's medical condition and situation. Communication should be done in an open and transparent manner. Sample patient letter below.

POTENTIAL CHANGES to Your Hemodialysis Schedule

Dear hemodialysis patient,

Thank you for understanding that these are difficult times during __ (state the emergency) __. Our goal is to continue to provide you and all patients in the unit the best and safest care possible.

In the days and weeks ahead, your medical team may make changes to your dialysis schedule. This will only be done if your team feels it is safe to do so. Changes may include:

1. Shorter dialysis time
2. Having you come in less often than usual
3. Having you come in at a different time (to reduce the number of patients in the waiting room at any given time)
4. Asking you to travel to a different dialysis unit.

At this time, we ask you to stay with your usual dialysis schedule. We may not be able to adjust or provide elective dialysis.

Please review this video on emergency preparedness to help you stay prepared.
Go to: www.bcrenal.ca – click on Health Info – click on Managing My Care – click on Emergency Preparedness – select the video box on the page.

Thank you for understanding. We appreciate your co-operation.

Your Hemodialysis Team

Appendix 2: Nursing Care Delivery Models by Stage of Staffing Emergency

Stage	Definitions & Responsibilities	Requirements
Stage 1: Conventional Operations, Minor Surge **Refer to Table 1** for a series of responses to ensure best use of available resources. **Primary Nursing** **HD Nurse: Ratio determined by unit protocol** **All HD trained nurses**	A group of patients is assigned to an HD-trained nurse member (primary nursing), matching patient factors, care provider competencies & the environment. Primary nurse completes all care activities (general & HD-specific care).	Patient Care Coordinator (PCC)/Team Lead (TL) uses tools to assign patients which consider patient factors (complexity, stability, predictability), care provider competencies (education, experience & expertise) & the environment (access to supporting resources such as VA RN & interdisciplinary team members). Primary nurse to inform PCC/TL of changes in patient condition/care needs.
Stage 2: Conventional Operations, Moderate Surge **Refer to Table 1** for a series of responses to ensure best use of available resources. **Primary Nursing: Ratio determined upon discussion with the team** **OR** **Team Nursing: Ratio determined upon discussion with team** **All HD trained nurses, some reassigned from elsewhere & provided orientation/refresher**	A group of patients is assigned to an HD-trained nurse member (primary nursing). • Appropriate where an HD-trained nurse is reassigned from elsewhere & feels competent & comfortable to independently provide all aspects of care (general & HD-specific care). OR A group of patients is assigned to two HD-trained nurse members (team nursing). • Appropriate where an HD-trained nurse(s) is reassigned from elsewhere & feels additional support is needed prior to independently providing all aspects of care (general & HD-specific care).	As above.

Appendix 2: Nursing Care Delivery Models by Stage of Staffing Emergency

Stage	Definitions & Responsibilities	Requirements
Stage 3: **Contingency Operations, Major Surge** **Refer to Table 1** for a series of responses to ensure best use of available resources. **Functional Team Nursing: Ratio determined upon discussion with team** **Care is provided in a team utilizing an HD nurse +/- non-HD trained nurse +/- other reassigned staff to support nursing care after receiving basic HD education & orientation**	A group of patients is assigned to a team of health care providers (functional team nursing). HD team includes an HD-trained nurse +/- non-HD trained nurse(s) +/- non-nurse(s). Each member of the team is assigned aspects of care that are within their scope & competency. HD nurse is responsible for the overall care of the group of patients and provides all care specific to HD. For aspects of care which may be appropriate to assign, refer to Refer to Helping in the Hemodialysis Unit: Information for Non-trained Hemodialysis Staff (Appendix 7) .	A huddle at the beginning of the shift supports the team to identify aspects of care appropriate to assign to a non-HD nurse or non-HD trained staff. Frequent check-in during the shift is required. Communication and reporting are key to this type of team nursing. SBAR style communication can be used throughout the shift to quickly communicate & address issues. One nurse per team acts as the lead who coordinates the care & escalates issues to the PCC/TL as needed.
Stage 4: Crisis Operations, Emergency Triage Status **Refer to Table 1** for a series of responses to ensure best use of available resources. **Functional Team Nursing: Ratio discussion determined upon discussion with team** Same care team as Stage 3 except includes HD-trained staff & non-HD trained staff from other HAs.	Same as Stage 3. Adjustments may be required if the number of HD-trained nurses is insufficient to group the patients into teams (e.g., all patients may be considered to be one group and staff functions assigned accordingly).	As above.

Adapted from: Fraser Health Authority Renal Program: Hemodialysis Nursing Assignments & Patient Care with Limited Resources Guidelines

References

The Hemodialysis Interdisciplinary Team: Matching Skill Mix with Patient Care Needs (Feb 2021).

Refer to Helping in the Hemodialysis Unit: Information for Non-trained Hemodialysis Staff.

Balancing the Needs of Acute and Maintenance Dialysis Patients during the COVID-19 Pandemic: A Proposed Ethical Framework for Dialysis Allocation. www.bcrenal.ca/resource-gallery/Documents/Balancing_the_needs_of_acute_and_chronic_dialysis_patients-2021.pdf

Quick Reference Guide-Approached to Nursing Assignments and Patient Care with Limited Resources. Nov 2020.

5.0 Sponsors

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- A working group of multidisciplinary renal care providers from across BC

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