PROVINCIAL STANDARDS & GUIDELINES

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Patients Missing ("No Shows") or Shortening Hemodialysis Treatments

September 2021

Approved by the BC Renal Hemodialysis Committee

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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 guidelines/resources, refer to http://bit.ly/28SFr4n.

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1.0 Scope

This guideline applies to adults receiving hemodialysis (HD) and hemodialfiltration (HDF) in:

- In-centre HD units.
- Community dialysis units (CDUs).

The purpose of the guideline is to standardize the procedure for follow-up of patients who miss ("no shows") or shorten (arrive late or leave early) HD treatments.

Related BC Renal (BCR) guideline(s): *Readiness of HD Outpatients to Leave the Unit Post-Treatment*. This guideline provides criteria for assessing the readiness of HD patients to leave the unit post-treatment. It also includes a process for follow-up of patients deemed not ready to leave the unit who choose to a leave anyway.

2.0 Review of the Literature/Internet

Why focus on missed or shortened dialysis treatments?

- Not attending, arriving late, or leaving early from HD treatments are examples of what is referred to in the literature as "non-adherence" or "non-compliance" to treatment.
- Non-adherence to HD treatments reduces the delivered dialysis dose and thus the adequacy of dialysis.
- Lowered delivered dialysis dose has been reported to increase morbidity (e.g., poorer metabolic profile1 and increased blood pressure[2]), worsen patient reported outcomes such as kidney disease burden and general and mental health1 and increase hospitalizations,[1,3-5] emergency department visits[4] and mortality rates. [1,3,5-10]
    - Skipping one or more dialysis sessions per month has been associated with a 16% higher relative risk of hospitalization rate and 30% higher relative risk of mortality than not skipping dialysis sessions.[8]
    - Shortening dialysis sessions (one or more by at least 10 minutes per month) has been associated with an 11% higher relative risk of mortality than not shortening.[8]
- Missing or shortening dialysis treatments is common (figures exclude periods of hospitalization).
    - Salmi's study (2012 – 2015 DOPPS data, 20 countries)[1] reported:
        - Frequency of missing dialysis treatments (at least once in 4 months) ranged from <1% in Italy and Japan to 24% in the United States.
        - In Canada, 10% of patients missed dialysis treatments at least once in 4 months (5th highest of the 20 countries studied) and 5% missed >1 session per month (n=332 across 20 Canadian hemodialysis facilities).
    - Saran's study8 (DOPPS data from the late 1990's and early 2000's for Japan, United States and 5 European countries) reported:
        - Frequency of one or more missed hemodialysis sessions/month ranged from 0.6% in Japan and Euro-DOPPS to 8% in the United States.
        - Frequency of shorted treatments by 10 minutes or more a month ranged from 6% in Japan to 11% in Euro-DOPPS to 17% in the United States.

Why do patients miss or shorten dialysis treatments?

- There are many reasons why patients miss or shorten dialysis treatments.
- Chan's study [4] (n=182,536 patients and 44M HD treatments) examined the association between missed HD treatments and 18 systemic and patient barriers in the United States. The most significant associations (in order of significance) were:

- Holidays (e.g., birthday, Valentine's day).
- Weather conditions (e.g., heavy snowfall on day of dialysis).
- Symptoms and/or psycho-social-emotional factors: GI upset including nausea, vomiting and diarrhea were the most common, followed by drug and alcohol use, depression and chronic pain.
- Transportation to/from dialysis (e.g., public transport, driving).

- Salmi's study[1] (2012 – 2015 DOPPS data, 20 countries) noted that missed hemodialysis treatments were more likely with younger age, less time on dialysis therapy, shorter HYD treatment, lower Kt/V, longer travel time to HD centres (>1 hour) and more symptoms of depression.
- Other reasons for patient non-adherence to treatment discussed in the literature included:
  - Patient cultural, religious or demographic factors (e.g., limited health literacy, age, race/ethnicity or marital support/status).1
  - Lack of motivation to get to dialysis or dialysis is not a priority (e.g., other patient obligations such as work, childcare and appointments).11
  - Day of the week (last session before the weekend is more likely to be skipped).
  - Not understanding the consequences of missed and shortened treatments.[11]

What might help to reduce the number of missing or shortened dialysis treatments?

- Finding solutions for the social reasons for missed or shortened dialysis treatments may not be within our span of control (e.g., inclement weather, transportation difficulties, patient health literacy, etc.).
- However, patient education about the risks of skipping treatments, understanding and assisting to remove barriers, treating underlying mental health issues and facilitating peer support mentorship or combinations are within our span of control and may be helpful in reducing the number of missing or shortened dialysis treatments.[3,4,11]

Video resource for patients on why getting enough dialysis is important.

https://www.youtube.com/watch?v=rlpzRLHC4z8

3.0 Recommendations

Recommendation #1:
Upon initiation of HD, assess and, as necessary update, the patient's understanding of the importance of coming to HD treatments on time, staying for the full treatment time and not missing treatments (may require the use of interpreters).

- **Review handout with patient on *Attending Dialysis Treatments* (Appendix 1).**

Recommendation #2:
When new patients start hemodialysis, discuss the usual steps that are taken if they do not show up for an HD treatment (Appendix 2).

- **Review answer to the final question on handout *Attending Dialysis Treatments* (Appendix 2) - *What happens if I don't show up for a hemodialysis treatment and I do not call the unit?***
- **If the patient does not want next-of-kin (or equivalent) or the Police/RCMP to be called, complete the Consent to be Called form (Appendix 3) or document same in patient's chart. Place signed form into patient's chart and provide a copy to the patient. Advise the patient's nephrologist.**
- **Repeat this discussion and update the Consent to be Called form and/or patient's chart upon patient request and/or as the patient situation changes.**

Recommendation #3:
If a patient does not show up within 30 - 60 minutes of a scheduled HD treatment, implement the Missed Appointment ("No Show)" protocol.[1] Refer to Appendix 2 (Algorithm).

Missed Appointment ("No Show") Protocol:

a. Attempt to contact the patient.
b. If able to contact the patient, enquire as to why they did not come for treatment.
    i. If unwell:
        - and able to come:
            - Encourage them. Assist with logistics. (e.g., arrange transportation).
            - Notify the nephrologist.
            - Document discussions and actions.
        - and not able to come:
            - Discuss with them the appropriate course of action, up to and including calling 911.
            - Notify the nephrologist.
            - Document discussions and actions.

    ii. If unwilling to come for treatment:
        - Encourage them to come. Ensure they understand the risks of a missed HD treatment(s).
        - If still unwilling, advise them what to do if an emergent health care need arises prior to their scheduled HD treatment (e.g., go to their local emergency department).
        - Notify the nephrologist. The nephrologist may suggest the patient take Kayexalate® to help lower potassium levels until the next dialysis treatment.
        - Refer to SW, if warranted, for psycho-social-emotional assessment/intervention and discussion of goals of care (see Appendix 3 for patient handout).
        - Document discussions and actions.
c. If unable to contact the patient, attempt contact again 30 min after the first attempt.
    i. If able to contact the patient, follow steps under recommendation #3 (b).
    ii. If unable to contact the patient, follow the patient's previously provided instructions.
        a. If patient has not expressed otherwise, phone the patient's next-of-kin (or equivalent) listed in the patient's health record or designated contact(s) listed on the *Consent to be Called* form.

            If able to reach the next-of-kin/designated contact, ask contact to check-in with the patient and, if successful, have patient contact the unit. Follow steps under recommendation 3(b). If not successful in reaching the patient, ask contact to advise the unit.

        b. If unable to reach the next-of-kin/designated contact or the contact reports being unsuccessful in reaching the patient AND unless patient has not expressed otherwise, contact the Police/RCMP using the non-emergency contact number (check local phone book or www.ecomm911.ca/non-emergency-calls/find-your-local-non-emergency-numbers) and request a "wellness check."
        c. Notify the nephrologist of the actions and outcome.
        d. Refer to SW, if warranted, for psycho-social-emotional assessment/intervention and discussion of goals of care.
        e. Document discussions and actions as per usual HA practice.
        f. Input incident into Patient Safety & Learning System (PSLS).

[1] The specifics of who is responsible to implement the "no show" protocol is determined by individual HA/HD units. In most cases, it will be the nurse-in-charge (or equivalent).

iii. If unable to contact the patient and the patient has not expressed otherwise, attempt to call (in this order):
    a. Next-of-kin (or equivalent) or designated contact on the patient's chart.
    b. Police/RCMP using the non-emergency contact number and request a police/ RCMP "wellness check."
iv. If unable to contact the patient AND the patient is not capable of making his/her own health care decisions, attempt to call (in this order):
    a. Legal guardian, next-of-kin or designated contact on the patient's chart.
    b. Police/RCMP using the non-emergency contact number and request a Police/ RCMP "wellness check."

Recommendation #4:
If a patient arrives late for treatment, implement the "late arrival" protocol (see below).

"Late Arrival" Protocol:

a. If the patient arrives one or more hours before the normal ending time for their treatment:
    i. Ensure the patient is aware of the risks of shortened HD treatment time.
    ii. Attempt to adjust the treatment time so that the patient will receive as much treatment as possible without impacting the schedule for other patients. This may not be possible, and the unit is not obliged to extend the treatment time.
    iii. Notify the nephrologist[2] if treatment time is shortened by more than 15 minutes.
    iv. Document the discussion and actions as per usual HA practice.
b. If the patient arrives less than one hour before the normal ending time for their treatment or after the normal ending time for their treatment:
    i. Notify the nephrologist.
    ii. Ensure the patient is aware that dialysis will not be initiated for a run of less than one hour and the risks of missing an HD treatment.
    iii. Reschedule the HD treatment if requested by the nephrologist.
    iv. Document the discussion and actions as per usual HA practice.
c. Refer to Social Worker (SW), if warranted, for psycho-social-emotional assessment/intervention (see Appendix 1 for patient handout).

Recommendation #5:
If a patient wishes to leave their treatment early, implement the "leave early" protocol (see below).

"Leave Early" Protocol:

a. Ensure the patient is aware of the risks of shortened HD treatment time.
b. Notify nephrologist if treatment time is shortened by more than 15 minutes.
c. Document the discussion and actions as per HA protocol.
d. Assist with logistics to prevent future occurrences (e.g., if being picked up by family, friends, HandyDART, suggest pick up time at an appropriate interval post-dialysis).
e. Refer to SW, if warranted, for psycho-social-emotional assessment/intervention (see Appendix 1 for patient handout).

[2] Nurse Practitioner (NP) may be the appropriate first contact at some sites. The same may be true in other references to "nephrologist" throughout this guideline.

4.0 References

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7. Wolfe RA, Hulbert-Shearon TE, Ashby VB, Mahadevan S, Port FK. Improvements in dialysis patient mortality are associated with improvements in urea reduction ratio and hematocrit, 1999 to 2002. *American journal of kidney diseases*. 2005;45(1):127-135.
8. Saran R, Bragg-Gresham JL, Rayner HC, et al. Nonadherence in hemodialysis: Associations with mortality, hospitalization, and practice patterns in the DOPPS. *Kidney Int.* 2003;64(1):254-262.
9. Leggat JE, Orzol SM, Hulbert-Shearon TE, et al. Noncompliance in hemodialysis: Predictors and survival analysis. *American Journal of Kidney Diseases*. 1998;32(1):139-145.
10. Unruh ML, Evans IV, Fink NE, Powe NR, Meyer KB. Skipped treatments, markers of nutritional nonadherence, and survival among incident hemodialysis patients. A*merican journal of kidney diseases*. 2005;46(6):1107-1116.
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5.0 Sponsors

Developed by:

- A working group of multidisciplinary renal care providers.
- Input into the February 2016 guideline was provided by the BC Renal Social Workers Group, the BC Renal Directors/Managers Group and the BC Risk Management Group.
- Input into the February 2021 guideline was provided by the BC Renal Social Workers Group and the BC Risk Management Group.

Approved by:

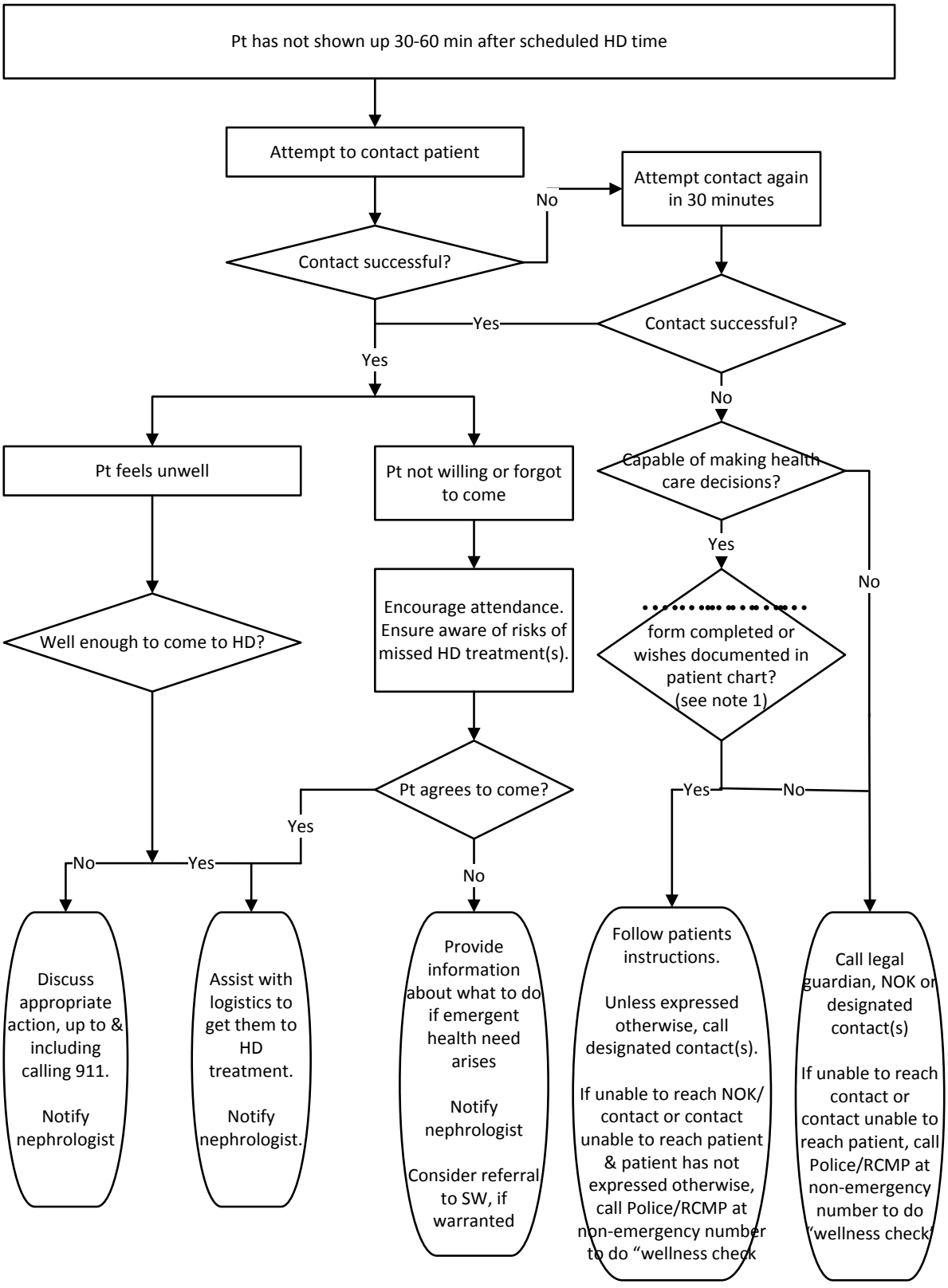
- BCR Hemodialysis Committee: January 2016; January & March 2021.
- BCR Medical Advisory Group (MAG): January 2016. May 2021.

This guideline is based on scientific evidence available at the time of the effective date; refer to www.bcrenal.ca for most recent version.

6.0 Appendices

Appendix 1: Attending Dialysis Treatments (patient information sheet)
Appendix 2: Missed Appointment ("No Show" Protocol (Algorithm)
Appendix 3: Consent to be Called (for patients to complete)

Appendix 1: Missed Appointment ("No Show") Protocol (Algorithm)



Note 1: If the patient indicates that he/she does not wish to have Police/RCMP called, please advise the patient's nephrologist.

Appendix 2: Patient Information Sheet - Attending Dialysis Treatments

Attending Dialysis Treatments

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It is important that you to show up for your dialysis treatments — each and every run. It's for your physical well-being.

What if I need to miss a hemodialysis treatment?

Generally, it is best not to miss treatments. If you absolutely must miss your treatment, please call the hemodialysis unit as soon as you know.

What if I feel too sick to come to hemodialysis?

The reason for feeling sick may be related to your kidney disease, so coming for dialysis is very important. If you feel sick, call the dialysis unit and get instructions from them. If you have severe problems such as shortness of breath, chest pain, abdominal pain, unusual weakness, excessive bleeding, etc, call 911 or go to your nearest Emergency Room.

If you are admitted to hospital, please ask your nurse at that hospital to call your hemodialysis unit. We will arrange for you to receive your next hemodialysis treatment.

Why is it important that you receive your full dialysis treatment?

Hemodialysis treatments only replace a small part (less than 5 to 10%) of the normal function of your kidneys. If you don't get enough dialysis, your blood will hold on to more of your body's waste products and increase the chances that you'll feel sick.

You will also be at higher risk for infection and bleeding. Because extra fluid will need to be pulled off when you next have dialysis, you may have cramps and your blood pressure may be low.

If you don't have enough dialysis, you may experience some or many of these symptoms:

- Feeling weak and tired all the time
- Difficulty sleeping
- Loss of real weight, poor appetite, nausea
- Shortness of breath
- Bad taste in mouth
- Body odor
- Itchy skin

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Time Lost When You Shorten or Miss your Dialysis Time

You can reduce your chances of having these problems by receiving your full dialysis treatment time. Try to show up for your dialysis on time and stay for your full treatment. If you show up late or leave early, you will miss valuable treatment time. We can talk to you about this, but in the end it is your decision. If you regularly miss or shorten your treatments, it adds up and can cause permanent harm to your body. By participating in your care, you improve how your body responds to the dialysis treatment.

Shortened Treatments	
Minutes lost each treatment	**Dialysis hours lost each year**
10	26 hours
15	39 hours
20	52 hours
30	78 hours

*assumes 3 - 4 hour dialysis treatments per week

Missed Treatments	
Minutes lost each treatment	**Dialysis hours lost each year**
12 (1 per month)	48 hours
24 (2 per month)	96 hours
36 (3 per month)	144 hours

What happens if I don't show up for a hemodialysis treatment and I do not call the unit?

Your safety is important to us. If, you do not show up for a specific treatment, we will attempt to contact you to check how you are doing.

If we cannot reach you, we will attempt to contact a family member/friend. If none of these contacts can reach you, we will call the Police/RCMP and ask them to check in on you at your home to make sure you are safe (it is called a "well-being" check.)

If you do not want us to contact a family member/friend or the Police/RCMP to do a "well-being check," please discuss this with your dialysis team.

Appendix 3: Patient Information Sheet - Consent to be Called

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Consent to be Called

PATIENT INFORMATION LABEL

Name: _____

Address: _____

Phone: _____

Date of Birth (MM/DD/YYYY): _____

PHN: _____

I, _____
understand that it is my responsibility to let my hemodialysis unit know if I am unable to attend on a specific day. Hemodialysis unit phone number: _____.

I understand that in the event that I do not show up for dialysis, the staff from the hemodialysis unit will attempt to contact me to check on how I am doing.

If I cannot be reached, please attempt to contact:

	Name	Relationship	Phone Number
☐	_____	_____	_____
☐	_____	_____	_____
☐	_____	_____	_____

If none of the contacts provided are able to reach me:

- ☐ Call the Police/RCMP and request a "well-being" check.
- ☐ Do not call the Police/RCMP to do a "well-being" check. I have been advised that by refusing to allow the Police/RCMP to check on me I will be at increased risk of harm, including death, and I accept that risk.

If my preferences change, I will provide an updated form to my kidney care team.

Agreement
The information provided on this form was discussed with me by a member of my care team. I have had the opportunity to ask questions. I am satisfied with the explanations and understand them.

Signature of: ☐ Patient ☐ Substitute Decision Maker	Print name of Patient /Substitute Decision Maker
Signature of witness	Print name & designation of witness
Date & time signed (day/month/year)	

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Consent to be Called

PATIENT INFORMATION LABEL

Name: _____

Address: _____

Phone: _____

Date of Birth (MM/DD/YYYY): _____

PHN: _____

Interpreter

I have translated this document to the best of my ability and confirmed with the patient that he/she has no further questions and the contact information above is correct.

_____ Signature of Interpreter

_____ Print name of Interpreter

_____ ID Number

_____ Date signed (day/month/year)

_____ Time (HH:MM)

Review of Agreement

- Review agreement with patient **upon patient request and/or as patient situation changes**.
- If patient changes his/her wishes for follow-up contact (e.g., now does not wish anyone to be contacted), complete new consent. Otherwise note the date of the review below.

Review date	Reviewed By (care team member)