

Primary Care Network: Client Training in Diabetes Blood Glucose Monitoring

Site Applicability

VCH Richmond Primary Care Network (PCN) sites (who have approval to submit Confirmation of Training in Blood Glucose Monitoring Forms to Health Insurance BC (HIBC)/Pharmacare)

Practice Level

Profession	Basic Skill	Advanced Skill (requiring additional education)
Registered Nurse (RN), <i>without</i> Certified Diabetes Educator (CDE) designation	<ul style="list-style-type: none"> Clinical history Client education, including: <ul style="list-style-type: none"> Use of glucose meter Basic diabetes education 	Sign off on the Confirmation of Training in Blood Glucose Monitoring form (see App A).
Registered Dietitian (RD), <i>without</i> CDE designation	<ul style="list-style-type: none"> Clinical history Basic diabetes education 	Sign off on the Confirmation of Training in Blood Glucose Monitoring form (see App A).
RD/RN <i>with</i> CDE designation	<ul style="list-style-type: none"> Clinical history Client education, including: <ul style="list-style-type: none"> Use of glucose meter Basic diabetes education Sign off on the Confirmation of Training in Blood Glucose Monitoring form (see App A).	N/A

BC PharmaCare covers blood glucose test strips (BGTS) for eligible clients. The number of BGTS covered for each client within a calendar year is limited and based on their diabetes treatment. To be covered for BGTS, clients must complete blood glucose monitoring training at a Diabetes Education Centre (DEC) or PCN site.

This guideline outlines required education and training for a clinician to obtain advanced skills in providing client education that are necessary to sign off on the [Confirmation of Training in Blood Glucose Monitoring form](#) needed for coverage eligibility of BGTS.

For further information, see the BC PharmaCare [website](#) and blood glucose testing policy.

Requirements

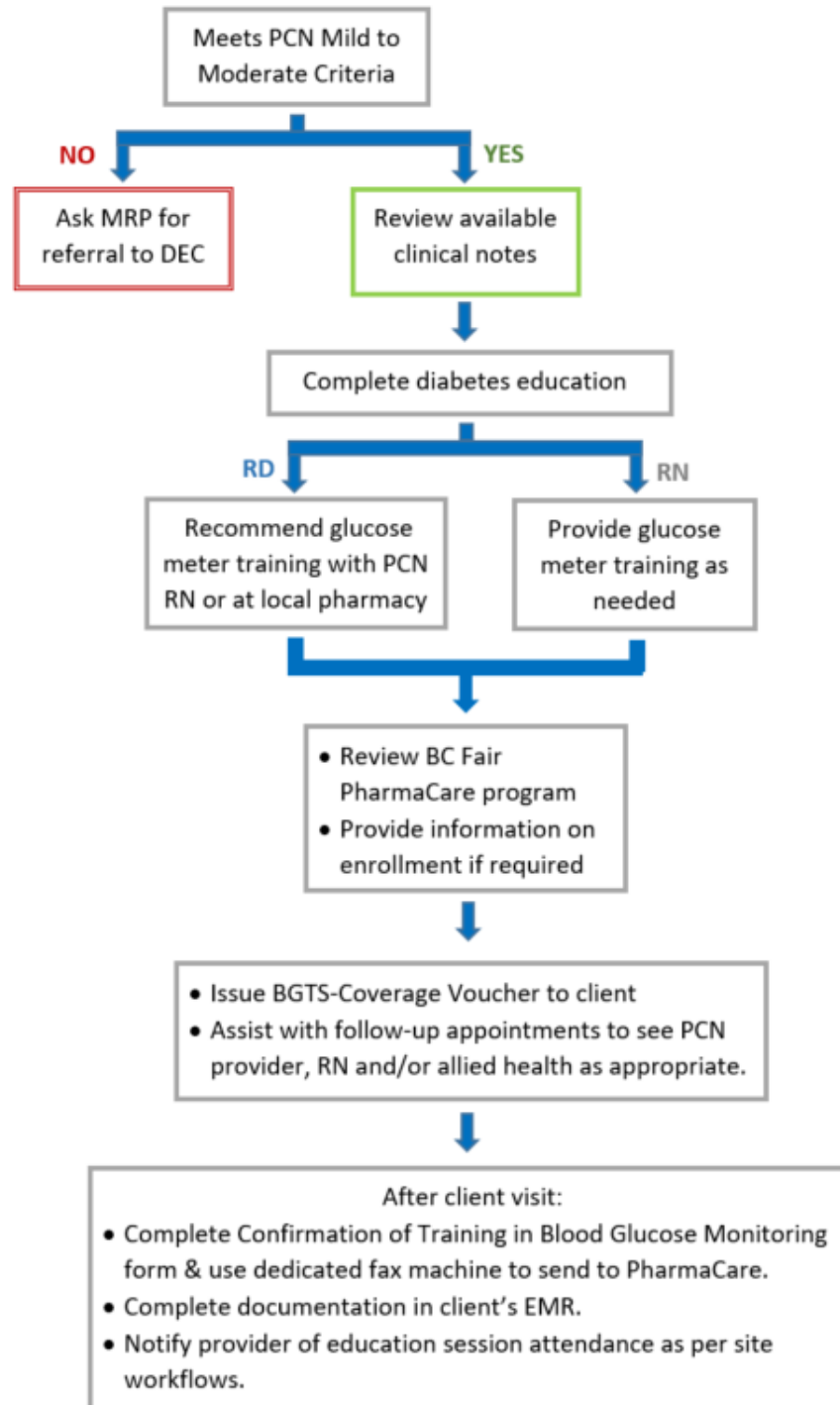
Profession	Requirements
RD/RN without CDE designation	<ul style="list-style-type: none"> Must complete the PCN Clinician Blood Glucose Monitoring Competency Checklist annually and review with the Regional PCN Clinical Educator (or designate) or a Dietitian Practice Lead. Individual learning plans must be in place to address competencies that need to be met prior to performing this activity independently. Checklists must be reviewed and signed off annually.
	<ul style="list-style-type: none"> Work within their individual competency and scope of practice. Collaborate with the interdisciplinary team in providing care. Ensure seamless and timely consultation and referrals to providers and allied team members, as needed. Ensure site workflows are in place to escalate care as per this guideline.
RN without CDE designation	<p>If demonstrating and providing glucose meter education, review the following:</p> <ul style="list-style-type: none"> Monitoring Glucose (phcnet.ca) VCH Hypoglycemia, Management in Adults Protocol VCH IPAC Home & Community Care Resource Manual
	The Regional PCN Clinical Educator (or designate) signs off on annual RN competency checklists and learning plans.
RD without CDE designation	The Dietitian Practice Lead signs off on annual RD competency checklists and learning plans.
RD/RN with CDE designation	Clinicians with current CDE designation are not required to complete the competency checklist. CDE designation is renewed every 5 years on the clinician's own time and expense. If CDE designation has lapsed, the clinician must demonstrate the same competencies as a non-CDE

Need to Know

- VCH RNs & RDs in PCN sites are now able to sign-off the confirmation of blood glucose training and submit the Confirmation of Training in Blood Glucose Monitoring Forms to Health Insurance BC/Pharmacare ([App A](#)) for clients who have "mild to moderate" diabetes ([App B](#)).
- This guideline outlines required client education to have their [Confirmation of Training in Blood Glucose Monitoring form](#) signed off by an RN or RD. The clinician faxes the form to PharmaCare using a dedicated fax machine, to ensure that there is coverage for the client's BGTS:
 - Clients with pre-diabetes:** Duration of coverage is 2 years.
 - Clients diagnosed with diabetes:** Duration of coverage is indefinite.

Algorithm

Overview of process for obtaining coverage for blood glucose testing strips in VCH PCNs



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Equipment and Supplies

All Clinicians

- [Confirmation of Training in Blood Glucose Monitoring form](#)
- Blood Glucose Test Strips (BGTS) – Coverage Voucher ([App C](#))

RNs

- Glucose meter
 - BGTS
 - Lancets and a lancing device (or single-use, auto-disabling lancet device with an automatic blade retraction system)
- Alcohol wipes
- Cotton ball, tissue paper or gauze
- Sharps container
- Disposable gloves

Practice Guideline

Clinicians must use principles of cultural safety, and trauma and violence-informed practice when providing client-centred care and education. This includes inquiring about the client's:

- Preferred language ([Provincial Language Services](#))
- Preferred modality of education (i.e., virtually, in person, paper)
- Reading level

Assessment

- Request received from client's provider for diabetes education and/or to complete the [Confirmation of Training in Blood Glucose Monitoring form](#).
 - Confirm that the diagnosis of pre-diabetes or diabetes meets the VCH PCN "mild to moderate" criteria ([App B](#)).
 - If client meets the VCH PCN "Complex/Advanced" criteria ([App B](#)), liaise with the referring provider to request a referral to a DEC and/or specialist.
- **RN:** Nursing diagnosis of client education is required to sign off on the [Confirmation of Training in Blood Glucose Monitoring form](#).
- **RD:** Nutrition diagnosis of client education is required to sign off on the [Confirmation of Training for Blood Glucose Monitoring form](#).

Escalation of Care		
Scenario	Assessment Finding or Task	Intervention
Signs and Symptoms	RN to observe for signs and symptoms of: <ul style="list-style-type: none"> • Dehydration • Feeling very thirsty • Loss of appetite • Nausea • Vomiting • Abdominal pain • Acute illness • Infection • Hypoglycemia • Hyperglycemia • Rapid breathing • “Fruity” breath • Decompensation from Hyperosmolar Hyperglycemia State (HHS) • Diabetic Ketoacidosis (DKA) • Unintentional weight loss • Cognitive changes (i.e., confusion, lethargy or coma) 	RNs working in provider’s clinics perform a full clinical assessment and consult with clinic provider immediately. Based on clinical presentation, send client to urgent or emergency services, as appropriate.
	RD to observe for above and work collaboratively with RN and provider for necessary assessments and interventions.	
Medical or Surgical Procedures	Medical or surgical procedures that require: <ul style="list-style-type: none"> • Fasting • Intake modification • Medication preparations • Diabetes medication adjustments before/after procedure 	Refer to provider or specialist.
Outside competencies or scope	Client diabetes education and management is outside of clinician’s individual competency or scope of practice.	Refer to provider and PCN interdisciplinary team as appropriate.
Complex or advanced diabetes	Client diabetes care is considered complex or advanced.	Provider to refer to DEC or specialist.

Intervention

Use the **Diabetes Education Reference/Checklist for PCN Clinicians** ([Appendix D](#)) as a teaching guide. Discuss and prioritize medical concerns according to the client’s goals. Acknowledge that not all topics may be addressed during one consult and may require further follow up meetings to do so.

Teaching duration will be based on RN or RD discretion, and will take into account factors such as cognitive status, client capacity to engage in longer duration education sessions, and the current presentation of the client. Sufficient teaching may be completed during the initial visit, but follow-up appointments (in-person or virtual) may be needed depending on factors such as client capacity to retain education after visit, client education level, and other presenting concerns such as an increased risk for diabetes distress.

1. [Self-Management of Blood Glucose \(SMBG\)](#)

- Education should include:
 - Purpose, frequency, timing, blood glucose targets, record keeping and duration
 - Consideration of cost of supplies, client lifestyle and willingness, medication regimen, nutrition, physical activity, age, [sick day management](#) and risk for hypoglycemia
- Review Diabetes Canada's [Appendix 5 self-monitoring of blood glucose \(SMBG\) recommendation tool for health-care providers](#) and [Self-monitoring blood glucose \(SMBG\)](#).

2. **General Diabetes Care**

Depending on client's knowledge gaps, education can include:

- Types of diabetes
- Nutritional therapy
- Physical activity
- Diabetes medications: oral and/or injectable
- BG targets: fasting, pre-meal, post-meal, considerations for the frail elderly
- Hypoglycemia
- Complications
- Alcohol
- Sick day management

3. **Glucose Meter Teaching**

- The client may obtain a glucose meter **one of two ways**:
 1. During the client's clinic visit with an RN, who will then be able to
 - Provide glucose meter education,
 - Demonstrate usage to client, and;
 - Have client perform a return demonstration.
 2. From a community pharmacy, where the Pharmacist can be asked to demonstrate and educate device function and usage to the client.
- Depending on client's knowledge gaps, education can include:
 - Handwashing
 - Site identification and purpose of rotating fingertips
 - Alternative site testing (if appropriate)
 - Size of required blood drop
 - How to use the lancet (one-time use only) with lancing device
 - Community sharps disposal (not in household garbage)
 - BGTS expiration once opened
 - Battery replacement
 - How to obtain extra supplies
 - Meter cleaning
 - BG record keeping

4. Complete the [Confirmation of Training in Blood Glucose Monitoring form](#) and submit to PharmaCare:
 - Complete required fields.
 - Obtain the PCN's unique PharmaCare DEC code from the clinical leads for your program.
 - Fax to PharmaCare on the same day. If not possible, ensure the BGTS coverage voucher's date matches that on the day it is faxed.
 - Form **can only be faxed** from the designated fax number.
 - If information is missing or a different fax machine is used, the application will be rejected.
 - PharmaCare enters client's BGTS coverage eligibility on PharmaNet.
5. Complete and give client **BGTS – Coverage Voucher** ([App C](#)):
 - Date on coverage voucher should match date on the [Confirmation of Training in Blood Glucose Monitoring form](#).
 - This voucher authorizes a one-time claim of BGTS as a benefit under PharmaCare while waiting for client's eligibility to be registered on PharmaNet.
 - Inform the client that they must present the voucher to a community Pharmacist the first time BGTS' are purchased in order to benefit from this one-time claim.
6. If the client has questions about the BC Fair PharmaCare, refer them to:
 - [Fair PharmaCare Plan](#) (available in several languages)
 - [Annual Quantity Limits - BGTS](#) (available in several languages)
 - [Medication Affordability \(VCH\)](#)
7. Refer to community services (e.g. exercise resources), provider (e.g. medication management, lab results) and PCN allied team (e.g. motivational counselling), as appropriate.
8. Review client recommendations and book next follow up appointment as necessary.

Documentation

Clinicians will document in appropriate sections of their site's electronic medical record (EMR) as per their college and VCH policies and guidelines, including:

- [VCH Documentation Policy](#)
- [VCH Community Medication Standard](#)
- [BCCNM Documentation Practice Standards for LPNs, NPs, RNs, and RPNs](#)
- [CDBC Standards for Record Keeping](#)
- [Documentation Guidelines: Dietitians](#)

Documentation should include:

- General topics covered during the visit
- Clinical assessment, interventions and client response & goals (e.g. weight, BP, foot assessment, nutrition)
- Completion and faxing of the [Confirmation of Training in Blood Glucose Monitoring form](#)
- Completion and provision of the BGTS – Coverage Voucher ([App C](#)):
- Educational resources provided

- Care plan
- Follow up appointment

For clinicians using PARIS:

- PARIS case notes - Primary Care - [General Services \(vch.ca\)](https://vch.ca)
 - For Richmond PCN, see *PCN Information Toolkit for Delivery of Diabetes & BGM Education* that has charting guidelines for diabetes group education classes.

Expected Client/Family Outcomes

- Increase and expedited community access for BGTS coverage and diabetes education and care management.
- Improved client and family experiences and improved clinical outcomes.
- Confidence in self-managing blood glucose levels and increased awareness of the benefits of engaging in regular physical activity, maintaining a healthy diet, and taking medication as prescribed and managing overall lifestyle goals.
- Able to describe when SMBG is needed and individual BG targets.
- If reviewing use of glucose meter with a RN, feels confident in performing SMBG.
- Understanding of Fair PharmaCare and how to get required supplies.
- Knowledge of any medications (e.g. purpose, how to take).
- Recognizing signs and symptoms of hypoglycemia, treatment options, preparedness and prevention.
- Knowledge of when to consult most responsible provider (i.e. change in BG level, medication adjustment, sick day management, etc.).

Educational Resources/Handouts

- See *PCN Diabetes Education Toolkit for PCN Clinicians* for a comprehensive list of diabetes resources
- [On the Road to Diabetes Health](#) booklet provides a good overview of diabetes for the clinician and client. Available languages: English, Simplified Chinese, Punjabi and Farsi.
- [Diabetes Canada | Clinical Practice Guidelines - Client Resources](#)
 - For a list of available client handouts in various languages.
- [VCH Chronic Disease Management – Diabetes](#)
- [Health Link BC](#)
 - [Health Link BC 811](#) (Registered Nurses, Registered Dietitians, Pharmacists, qualified exercise professionals).
 - [Blood Glucose Test Strip – Quantity Limits](#) (client information sheets: English, French, Chinese traditional & simplified, Tagalog, Farsi, Punjabi, Korean and Vietnamese).
- Health Canada (see [Canada's Food Guide](#))
- [Self-Management British Columbia](#) (see [Diabetes Program](#))
- [interCultural Online Health Network](#) (see [Diabetes](#))

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Related Documents

- [VCH Hypoglycemia, Management in Adults Protocol](#)
- [VCH IPAC Home & Community Care Resource Manual](#)
- [Nurse Independent Activities \(NIA\) and Nurse Initiated Protocols \(NIP\)](#)
- [VCH Community Medication Standard](#)

References

Diabetes Canada Clinical Practice Guidelines Expert Committee. (2018, April). *Diabetes Canada 2018 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada*. Can J Diabetes. 2018;42(Suppl 1):S1-S325.

Diabetes Canada. (n.d.). *Resources for people with diabetes*. <https://guidelines.diabetes.ca/client-resources>

Maks, L. [Providence Health Care Vancouver]. (2022, November 29). *Rec Blood Glucose Meters* [Video]. YouTube. <https://www.youtube.com/watch?v=FHK0qVGWPT0>

Sherifali D., Berard L.D., Gucciardi E., MacDonald B., & MacNeill G. *Diabetes Canada 2018 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada: Self-Management Education and Support*. Can J Diabetes 2018;42

Definitions

Certified Diabetes Educator (CDE)® – A CDE “is a health professional, committed to excellence in diabetes education, who has a sound knowledge base in diabetes care/management and education processes, as well as good communication skills and who has passed the Canadian Diabetes Educator's Certification Board (CDECB) exam.” [CDECB – Canadian Diabetes Educators Certification Board](#)

Self-Monitoring of Blood Glucose (SMBG) – Self checking of blood sugar levels.

Sick Day Management – When clients have diabetes and are sick (e.g. a cold, flu, or infection), glucose level can be higher and harder to control. Client may still experience hypoglycemia and be at risk for dehydration. Education is needed on sick day preparedness, what to do when clients are sick (e.g. with activity, BG testing, medications, and meal plan & fluids) and when to seek help.

Appendices

[Appendix A: Confirmation of Training in Blood Glucose Monitoring Form](#)

[Appendix B: Diabetes Definition – PCN Mild to Moderate](#)

[Appendix C: Blood Glucose Test Strip – Coverage Voucher](#)

[Appendix D: PCN Generic Blood Glucose Test Strip Education Checklist](#)

Appendix B: Diabetes Definition – PCN Mild to Moderate

Diabetes Definition – PCN Mild to Moderate

These definitions were suggested by a working group comprised of VCH PCN RNs, chronic disease management nurses (CDMNs) and providers, and VCH DEC CDMNs and endocrinologists. The purpose of these definitions is to help provide guidance as to whether a client may best be supported by their PCN team or by their local DEC for the purposes of the completion of the *Confirmation of Training in Blood Glucose Monitoring Form*. A PCN clinician or provider may refer a client to a DEC anytime if deemed beneficial, and/or at the client's request, regardless if the client meets the criteria or not.


MILD to MODERATE Criteria	COMPLEX/ADVANCED Criteria
<ul style="list-style-type: none"> Pre-diabetes (A1C 6.0 - 6.4%, IFG 6.1 - 6.9 mmol/L, IGT 7.8 - 11.0 mmol/L) Type 2 diabetes newly diagnosed and pre-existing^{1,2} A1C < 8.6% GLP1-RA Basal insulin starts and adjustments with Provider's orders 	<ul style="list-style-type: none"> Type 1 diabetes Type 2 diabetes A1C ≥ 8.6% Complex co-morbidities, examples include: <ul style="list-style-type: none"> Dialysis Gastroparesis Active chemotherapy Pediatric populations (<18 years old) Pre-conception planning (pre-diabetes, Type 1 and 2) Gestational diabetes DKA or HHS Recurrent Hypoglycemia Steroid-induced Hyperglycemia Insulin pumps Client needing more than basal insulin

¹ - Client not exhibiting symptomatic hyperglycemia and/or decompensation

² – Provider deems healthy lifestyle changes ± pharmacological therapy initiation or advancement can help achieve client's glucose target in the next 3-6 months

Appendix C: Blood Glucose Test Strip – Coverage Voucher

[Blood Glucose Test Strip – Coverage Voucher](#)

 **BRITISH COLUMBIA** | Ministry of Health

HLTH 1548 Rev. 2014/09/29

BLOOD GLUCOSE TEST STRIP – COVERAGE VOUCHER

This card authorizes the person named below for a one-time claim of Blood Glucose Test Strips as a benefit under PharmaCare.

Client Name: _____

Personal Health Number: _____

Date: _____
(yy/mm/da)

Pharmacist - Please fax a copy of both sides of this voucher to Health Insurance BC.

I hereby consent to the release of this information to the Minister of Health, or his or her delegate. The information will be relevant to and used solely for the purpose of determining and administering my PharmaCare benefits. Provincially, the information will be protected in accordance with the *Pharmaceutical Services Act* and the *Freedom of Information and Protection of Privacy Act* of British Columbia.

signature of client

FOR FURTHER INFORMATION CONTACT:

Diabetes Education Centre / Location / Code

Appendix D: PCN Generic Blood Glucose Test Strip Education Checklist

Generic Diabetes Client Education Reference/Checklist for PCN Clinicians

Diabetes Education	Educational Material
Review with client: <input type="checkbox"/> What is diabetes <input type="checkbox"/> Self-management (lifestyle, medications, etc.) <input type="checkbox"/> Hyper-/hypo-glycemia s/s <input type="checkbox"/> Blood glucose (BG) testing <input type="checkbox"/> Individual BG target <input type="checkbox"/> Meter teaching: <input type="checkbox"/> taught <input type="checkbox"/> pharmacy <input type="checkbox"/> Review BC Fair Pharmacare	Offer client: <input type="checkbox"/> Diabetes Canada handouts <input type="checkbox"/> Diabetes Canada Balanced Plate handout <input type="checkbox"/> On the Road to Diabetes Health booklet (English, Simplified Chinese, Punjabi, Farsi) <input type="checkbox"/> BG meter (if needed) <input type="checkbox"/> BG diary or logbook <input type="checkbox"/> BGTS coverage voucher
Confirmation of Training in BG Monitoring Form	Client Eligibility
<input type="checkbox"/> Obtain form and fill in required fields <input type="checkbox"/> Required fields: <ul style="list-style-type: none"> Date Clinician's name & signature Client's name (same as CareCard) PHN Duration of coverage <ul style="list-style-type: none"> Type 2 and Type 1: Indefinite Pre-diabetes: 2-year expiration <input type="checkbox"/> Complete & fax to Pharmacare on same day. If not possible, date on form will be the day it is being faxed. The wallet card date must match the fax date. <ul style="list-style-type: none"> Must fax FROM the PCN fax # on form. <input type="checkbox"/> Send update to FP/NP in follow-up note.	<input type="checkbox"/> Registered for BC Fair Pharmacare <input type="checkbox"/> BG monitoring deem medically necessary <input type="checkbox"/> Ministry of Health determines financial eligibility
	BGTS Coverage Voucher or Wallet Card
	<input type="checkbox"/> Complete front & back of wallet card <input type="checkbox"/> Date on voucher should match date on confirmation of training form <input type="checkbox"/> Remind client that his/her pharmacist can call the PharmaNet Help desk for the client to check if <i>Confirmation of Training in BGM</i> has been approved.
Client Handouts	
<ol style="list-style-type: none"> Diabetes Canada <ul style="list-style-type: none"> Managing-Your-Blood-Sugar.pdf (diabetes.ca) Managing-Blood-Glucose_Chinese_Web.pdf (diabetes.ca) Diabetes Canada Clinical Practice Guidelines - SMBG Recommendation Sheet On the Road to Diabetes Health booklet (English, Simplified Chinese, Punjabi, Farsi) (located in VCH PHEM site – can print single copy or volume order) 62 Handouts for Diabetes Patient Health Education Materials Vancouver Coastal Health 	

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Fair Pharmacare Information

- [Fair PharmaCare plan - Province of British Columbia \(gov.bc.ca\)](#)
- [Arabic](#), [French](#), [Chinese \(simpl. and trad.\)](#), [Punjabi](#), [Farsi](#), [Spanish](#), [Korean](#), [Vietnamese](#), [Tagalog](#)
- [Patient information sheets - Province of British Columbia](#)

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Approved By: <i>(committee or position)</i>	VCH VCH: Regional DST Endorsement - 2 nd Reading Health Authority & Area Specific Interprofessional Advisory Council Chairs (HA/AIAC) Operations Directors Professional Practice Directors Final Sign Off: Vice President, Professional Practice & Chief Clinical Information Officer, VCH
Owners: <i>(optional)</i>	VCH Nursing Practice Initiative Lead, Professional Practice - Nursing