UNDERSTANDING THE GSC

VALUE-BASED PHARMACY INITIATIVE...

What is the GSC Value-based Pharmacy initiative?

The GSC Value-based Pharmacy initiative is designed with three key goals in mind:

1. Performance evaluation: Recognizing that the assessment and reporting of the quality of care delivered by health care providers leads to improved patient outcomes, GSC's goal is to help pharmacies across Canada gain insight into areas of patient care where they're already doing well and areas where they can improve by measuring pharmacy performance and assessing it against a set of validated medication-use quality measures.

2. Performance disclosure: GSC's goal is to improve access to better care for our plan members. To achieve this, we have made pharmacy performance information available to plan members through our Online Services platform enabling them to make informed decisions when selecting a pharmacy provider to support them in achieving their health goals.

3. Performance accountability: GSC has created a reimbursement framework that focuses on quality of care and value for spend. By rewarding high-performing pharmacies and incentivizing low-performing pharmacies, we can push the delivery of high-quality patient care.

How is pharmacy performance evaluated?

Eight validated medication-use measures have been selected to evaluate pharmacy performance. Performance scores for each measure are calculated by a neutral third party – Pharmacy Quality Solutions (PQS) – based on claims adjudicated through the GSC Advantage® system. An overall score, or Pharmacy Quality Rating, is then calculated using a composite of the individual performance measures.

Detailed performance information for your pharmacy is available from PQS through the EQuIPP dashboard. We strongly encourage all pharmacies to sign up with EQuIPP to obtain in-depth insight into their performance and opportunities for improvement.

What information is shared with plan members?

Individual performance for each measure is available only to pharmacies and is not shared with plan members. Only the Pharmacy Quality Rating, which reflects overall performance across all measures, is made available to plan members via GSC's Online Services.

gsc
green shield canada

What medication-use quality measures are used to assess performance and how were they selected?

The measures were selected because:
→ They address areas of high priority in our health care system.
→ They can be directly impacted by pharmacists' activities.
→ They're easy to track, understand, and improve upon.

And they're applicable to pharmacy practice in Canada; in fact, they align with some of the performance indicators tracked by provincial quality councils.

There are three primary types of measures:
1. Adherence Measures (Proportion of Days Covered or PDC)
   → Hypertension (RASA) PDC
   → Cholesterol PDC
   → Diabetes PDC
2. Disease Management Measures
   → Statin Use in Persons with Diabetes (SUPD)
   → Asthma – Suboptimal Control
   → Asthma – Absence of Controller Therapy
   → GSC Cardiovascular Health Coaching
3. Patient Safety Measures
   → High-risk Medication Use in the Elderly (HRM)

Understanding *Adherence (PDC)* Measures

Adherence or PDC measures assess the percentage of patients with prescription claims for the same drug or for another drug in the same therapeutic class, within a measurement period.

The PDC threshold is the level above which the medication has a reasonable likelihood of achieving the most clinical benefit (at or greater than 80 per cent).

The PDC methodology is a standard method used to measure medication adherence and is specified within the adherence measures endorsed by the Pharmacy Quality Alliance (the organization that developed the measures).

Minimum requirements for a patient to be eligible for the adherence measures include:

→ Patient must have at least two fills in the measurement period – regardless of the day supply of the prescription fills.
→ The first fill of the applicable medication (class) must be at least 91 days prior to the end of the measurement period.

The therapeutic categories covered by the PDC measures are:

→ **Cholesterol PDC**: Statins
→ **Diabetes PDC**: Non-insulin diabetes medications (including biguanides, sulfonylureas, DPP-4 inhibitors, TZDs, GLP-1 receptor agonists (or incretin mimetics), meglitinides, and SGLT2 inhibitors). Patients who receive an insulin product are excluded from the Diabetes PDC measure
→ **Hypertension (RASA) PDC**: Renin angiotensin system antagonists (including ACE inhibitors, ARBs, and direct renin inhibitors)

PDC is calculated by dividing the number of days in period "covered" into the number of days in period x 100 per cent.

The numerator (number of days in period "covered") is equal to the number of days covered by the prescription fills (based on day supply) during the period. This is NOT a sum of day supply, but a summation of time arrays to reflect days supplied for each fill, thus removing any overlap of prescription fills.

The denominator (number of days in period) is the number of days from when the prescription is first filled during the measurement period to the end of the measurement period.

PDC calculation is performed for each individual patient.

An adherent patient has an individual PDC score that is greater than or equal to 80 per cent. In other words, they have at least 80 per cent of their eligible days covered by medication for the target therapeutic category.

The pharmacy's performance score reflects the percentage of adherent patients at that pharmacy, i.e., those who have an individual PDC score greater than or equal to 80 per cent.

Adherence or PDC performance scores are better when they are higher. This means that patients at that pharmacy are more adherent to their medication.

Example:

MEASURE	GSC PATIENTS	SCORE	GOAL	GAP
Hypertension (RASA) PDC[1]	122	**82%**	⇧81%	✓

→ This pharmacy's performance score for the Hypertension (RASA) PDC measure is displayed as 82 per cent.
→ This means that 82 per cent of the pharmacy's 122 patients are considered adherent (122 x 82% = 100 patients).
→ **Or**, that 100 out of 122 patients have a Proportion of Days Covered (PDC) score greater than or equal to 80 per cent.

In this scenario, the pharmacy would have 22 (122 eligible patients minus 100 patients that are adherent) patients that are non-adherent. Knowing this information enables the pharmacist to attend to these 22 patients and their reasons for non-adherence.

Patient Attribution for *Adherence (PDC)* **Measures**

Adherence measures use an encounter-based attribution method. In other words, the pharmacy that filled the most prescription claims within the measurement period for the target therapeutic category will be assigned responsibility for the patient.

If a patient fills the same number of prescriptions during the measurement period at multiple pharmacies, the patient will be attributed to the pharmacy that completed the most recent fill.

All paid prescription drug claims adjudicated through the drug plan, regardless of the dispensing pharmacy, will be counted towards the patient's PDC calculation.

Understanding the *Statin Use in Persons with Diabetes* Measure

The SUPD measure identifies the percentage of patients age 40-75 who were dispensed a medication for treatment of diabetes that were also dispensed a statin medication.

This therapy recommendation is based on the 2018 Diabetes Canada Clinical Practice Guidelines and 2016 Canadian Cardiovascular Society Guidelines for the Management of Dyslipidemia for the Prevention of Cardiovascular Disease in the Adult.

The SUPD measure was developed and is endorsed by the Pharmacy Quality Alliance.

The SUPD performance score is better when it is higher. This means that diabetic patients at the pharmacy receive recommended primary prevention therapy with statins more often.

Example:

MEASURE	GSC PATIENTS	SCORE	GOAL	GAP
Statin Use in Diabetes	38	**75%**	⇧78%	3%

→ This pharmacy's performance score for the SUPD measure is displayed as 75 per cent.

→ This means that 75 per cent of the pharmacy's 38 patients filled a statin along with their medications for diabetes treatment.

In this scenario, the pharmacy would have 10 patients (38 patients, 25 per cent not on a statin) to evaluate for a new statin therapy.

Patient Attribution for the SUPD Measure

For the SUPD measure, the pharmacy that first fills the statin medication for the patient is assigned responsibility for the patient.

If a diabetic patient does not have a statin medication in their profile, the pharmacy that filled the most diabetic medications (including insulin) for the patient within the measurement period is assigned responsibility.

It only takes one fill for a statin medication within the measurement period for the patient to be considered compliant with the SUPD measure.

Understanding the *Asthma Therapy* Measures

The patient population included in the two asthma measures are patients 6-50 years of age with asthma. They're defined as patients with consecutive fills of asthma medications during the measurement year. Excluded from the measure are those patients with at least one fill in the measurement year for one of the following:

→ COPD medication
→ Cystic fibrosis agent
→ Nasal steroid medication

Two asthma measures are reported:

→ *Suboptimal Control*: This measure refers to the percentage of patients with persistent asthma who were dispensed more than three canisters* of a short-acting beta2 agonist inhaler during the same 90-day period.

→ *Absence of Controller Therapy*: This measure refers to the percentage of patients meeting the numerator for the Suboptimal Control rate (i.e., those with more than three canisters of short-acting beta2 agonist inhalers during a 90-day period), who did not receive controller therapy (e.g., inhaled corticosteroids, long-acting beta-agonists, leukotriene inhibitors, or xanthines) during the same 90-day period.

Example 1:

MEASURE	GSC PATIENTS	SCORE	GOAL	GAP	AVERAGE (PROVINCIAL)
Asthma – Suboptimal Control	108	**14%**	⇩10%	4%	12%

→ This pharmacy's performance score for the Suboptimal Control measure is 14 per cent.

→ This number means that 14 per cent of the pharmacy's 108 patients with persistent asthma have been dispensed more than three canisters of short-acting beta2 agonist inhalers during the same 90-day period.

In this scenario the pharmacy would have 15 patients (108 patients, 14 per cent dispensed more than three canisters of short-acting beta2 agonist inhalers dispensed) to evaluate for asthma control.

Example 2:

MEASURE	GSC PATIENTS	SCORE	GOAL	GAP	AVERAGE (PROVINCIAL)
Asthma – Absence of Controller Therapy	73	**44%**	⇩40%	4%	41%

→ This pharmacy's performance score for the Absence of Controller Therapy measure is 44 per cent.

→ This number means that 44 per cent of the pharmacy's 73 patients have been dispensed more than three canisters of short-acting beta2 agonist inhalers during the same 90-day period and did not receive controller therapy.

In this scenario the pharmacy would have 32 patients (73 patients, 44 per cent did not receive controller therapy) that are in need of controller therapy.

The intended goal for these two measures is to have a lower performance score.

Patient Attribution for the Asthma Measures

For the Asthma measures, the pharmacy that fills the majority of the asthma medications for an individual patient is assigned responsibility for that patient. The pharmacy has responsibility for a patient across both measures.

Note: This is a count of canisters dispensed, not prescriptions filled. If a patient received two canisters at one fill, it counts as two canisters.

Understanding the *GSC Cardiovascular Health Coaching* Measure

The patient population included in the *GSC Cardiovascular Health Coaching* (CHC) measure refers to the percentage of eligible patients who received at least one coaching session during the measurement period. Refer to **GSC's Cardiovascular Health Coaching** program information on providerConnect for patient eligibility and other program details.

Example:

MEASURE	GSC PATIENTS	SCORE	GOAL	GAP	AVERAGE (PROVINCIAL)
GSC Cardiovascular Health Coaching	32	**23%**	⇧20%	✓	3%

→   This pharmacy's performance score for the CHC measure is 23 per cent.
→   This number means that seven patients of the 32 eligible for CHC received at least one coaching session.

The pharmacy has an opportunity to engage 25 patients (32 eligible patients minus seven who have already received at least one coaching session) in the Cardiovascular Health Coaching program.

Please note that Pharmacist Health Coaching is a reimbursed pharmacy service. More details around this program are available at **providerconnect.ca**.

Patient Attribution for the *GSC Cardiovascular Health Coaching* Measure

The pharmacy assigned the CHC opportunity will be the pharmacy that has filled the majority of total prescription claims for the patient. In the event of a tie for total prescription claims across more than one pharmacy, the pharmacy with the most recent date of service for the claim will be assigned the CHC opportunity.

For a pharmacy that completed a CHC service, the patient will be attributed to the pharmacy associated with the claim for the first CHC service within the measurement period, based on date of service.

Understanding the *High-risk Medication Use in the Elderly* Measure

The High-risk Medication Use in the Elderly (HRM) measure looks at the percentage of patients 65 years of age and older who received two or more prescription fills for the same high-risk medication (HRM) during the measurement period.

The list of medications (see Appendix A) in this measure was derived from a subset of the Beers List, which is maintained by the American Geriatrics Society. The medications on this list are intended to represent medications that have more significant risk of causing adverse outcomes when used in elderly patients. Some medications on the HRM drug list are only considered an HRM when used for a specific duration or at a specific dose per day.

The HRM measure is endorsed and maintained by the Pharmacy Quality Alliance.

The HRM measure is better when the performance score is lower. This means that fewer patients at the pharmacy are filling potentially inappropriate medications based on their age.

Example:

MEASURE	GSC PATIENTS	SCORE	GOAL	GAP
High-risk Medications	114	**12%**	⇩5%	7%

→ This pharmacy's performance score for the HRM measure is displayed as 12 per cent.
→ This means that 12 per cent of the pharmacy's 114 patients have filled two or more prescriptions for a medication on the HRM list.
→ In this scenario, the pharmacy would have 14 patients (114 x 12% = 14 patients) to review for more appropriate therapeutic alternatives.

Being proactive is key for this measure. Ideally, the pharmacist intervenes before the second prescription is dispensed. Once the patient fills the second prescription for an HRM, no change can be made to improve the patient's performance for this measure during the current measurement period.

Patient Attribution for the HRM Measure

Patient safety measures, such as the HRM Measure, use an event-based attribution.

The pharmacy that fills the second fill of an HRM (or the fill for the requisite dose or duration, depending on the medication) is assigned responsibility for the patient for the HRM measure.

If a patient has prescriptions, but no HRM fills, the pharmacy filling the most prescription claims for all medications within the measurement period will be assigned responsibility for the patient.

The intended goal for this measure is to have a lower performance score.

Understanding Benchmark Scores

GSC has established performance targets for each measure to guide your quality improvement efforts and to add context to your pharmacy's performance by helping you understand how you perform relative to other pharmacies.

How is the Pharmacy Quality Rating calculated?

The Pharmacy Quality Rating reflects pharmacy performance across all of the quality measures. For a pharmacy to have an quality rating calculated, they have to have performance information available for three or more individual quality measures with 10 or more patients eligible for each measure.

The quality rating is calculated based upon a composite of the individual performance measures with variable weighting applied.

Single-weighted measures:

→ Hypertension (RASA) PDC
→ Cholesterol PDC
→ Diabetes PDC

Double-weighted measures:

→ Statin Use in Persons with Diabetes (SUPD)
→ Asthma – Suboptimal Control
→ Asthma – Absence of Controller Therapy
→ GSC Cardiovascular Health Coaching
→ High-risk Medication Use in the Elderly (HRM)

Double-weighted measures have been selected based on GSC's and the pharmacy profession's common goal to support the evolution of pharmacy practice toward the delivery of high-quality patient care.

To calculate the quality rating, a star rating, based on percentiles, is assigned to all qualifying measures.

Weighting is then applied to calculate an overall star rating (from one to five stars).

Example:

OVERALL SCORE: 4.5 ★★★★⯪

Provincial Average: 3.0 ★★★☆☆

	MEASURE	GSC PATIENTS	SCORE	GOAL	GAP	AVERAGE (PROVINCIAL)
ADHERENCE	Hypertension (RASA) PDC[1]	46	97.8%	↑ 93.4%	✓	90.8%
	Cholesterol PDC[1]	39	97.4%	↑ 92.3%	✓	89.5%
	Diabetes PDC[1]	8	87.5%	↑ 92.0%	4.5%	88.7%
DISEASE MANAGEMENT	Statin Use in Diabetes	10	90.0%	↑ 77.8%	✓	75.4%
	Asthma – Suboptimal Control	0	N/A	↓ 16.7%	N/A	N/A
	Asthma – Absence of Controller Therapy	0	N/A	↓ 20.0%	N/A	N/A
	GSC Cardiovascular Health Coaching	4	0.0%	↑ 10.0%	10.0%	0.0%
SAFETY	High-risk Medications	62	8.1%	↓ 7.7%	0.4%	9.9%

Under "YOUR PHARMACY", "VERSUS GOAL", and "VERSUS OTHERS" headings.

STAR THRESHOLDS*

MEASURE NAME	1 STAR	2 STAR	3 STAR	4 STAR	5 STAR
RASA PDC	<86.4%	86.4%–90.9%	91.0%–93.8%	93.9%–97.0%	> 97.0%
Cholesterol PDC	<85.0%	85.0%–90.0%	90.1%–93.3%	93.4%–96.0%	> 96.0%
Diabetes PDC	<82.6%	82.6%–89.6%	89.7%–92.3%	92.4%–96.9%	> 96.9%
Statin Use in Diabetes	<61.5%	61.5%–70.0%	70.1%–76.7%	76.8%–83.3%	> 83.3%
Asthma – Suboptimal Control	>46.0%	46.0%–30.0%	29.9%–21.0%	20.9%–13.0%	< 13.0%
Asthma – Absence of Controller Therapy	>31.0%	31.0%–25.0%	24.9%–15.0%	14.9%–8.0%	< 8.0%
CV Health Coaching	<10.0%	10.0%–24.9%	25.0%–39.9%	40.0%–50.0%	> 50.0%
High Risk Medications	>15.0%	15.0%–10.8%	10.7%–8.0%	7.9%–4.3%	< 4.3%

Calculation of overall score:

QUALIFYING MEASURE	MEASURE-LEVEL STAR RATING	WEIGHTING
Hypertension (RASA) PDC	5 star	Single
Cholesterol PDC	5 star	Single
Statin Use in Diabetes	5 star	Double
High Risk Medication	3 star	Double

$$\frac{5 + 5 + 10 + 6}{6} = 4.333, \text{ rounded to 4.5 stars}$$

For illustration purposes only.

Table HRM-A: High-Risk Medications

DESCRIPTION	PRESCRIPTION PRODUCTS		
Anticholinergics (excludes TCAs)			
First-generation antihistamines (as single agent or as part of combination products) – *excludes OTC products*	Brompheniramine Carbinoxamine Chlorpheniramine Clemastine	Cyproheptadine Dexbrompheniramine Dexchlorpheniramine Diphenhydramine (oral) Dimenhydrinate	Doxylamine Hydroxyzine Meclizine Promethazine Triprolidine
Antiparkinson agents	Benztropine (oral)	Trihexyphenidyl	
Antispasmodics	Atropine (excludes ophthalmic) Dicyclomine Scopolamine	Belladonna alkaloids Hyoscyamine	Clidinium-Chlordiazepoxide Propantheline
Antithrombotics			
Antithrombotics	Ticlopidine	Dipyridamole, oral short-acting (does not apply to the extended-release combination with aspirin)	
Anti-infective			
Anti-infective	Nitrofurantoin (include when cumulative day supply is >90 days) **(A)**		
Cardiovascular			
Central alpha blockers	Guanfacine Reserpine (>0.1mg/day) **(B)**	Guanabenz	Methyldopa
Cardiovascular, other	Disopyramide	Digoxin (>0.125mg/day) **(C)**	Nifedipine, immediate release
Central Nervous System			
Antidepressants (alone or in combination)	Amoxapine Desipramine Nortriptyline Protriptyline	Amitriptyline Doxepin (>6mg/day) **(D)** Paroxetine	Clomipramine Imipramine Trimipramine
Barbiturates	Amobarbital Pentobarbital Secobarbital	Butabarbital Mephobarbital	Butalbital Phenobarbital
Central Nervous System, other	Meprobamate		
Nonbenzodiazepine hypnotics (include when cumulative day supply is >90 days) **(E)**	Eszopiclone	Zolpidem	Zaleplon
Vasodilators for dementia	Ergoloid mesylates	Isoxsuprine	
Endocrine			
Endocrine	Desiccated thyroid	Estrogens** with or without progesterone (oral and topical patch products only)	Megestrol
Sulfonylureas, long-duration	Chlorpropamide	Glyburide	
Pain Medications			
Pain Medications	Meperidine	Pentazocine	
Non-COX-selective NSAIDS***	Indomethacin	Ketorolac (includes parenteral)	
Skeletal muscle relaxants			
Skeletal muscle relaxants (as a single agent or as part of a combination product)	Carisoprodol Chlorzoxazone	Cyclobenzaprine Metaxalone	Methocarbamol Orphenadrine

Abbreviations: OTC, over the counter.

Note (in general – unless otherwise specifed): Includes combination products and the following routes of administration: oral, transdermal, injectable (IJ, SC, IM, IV), rectal, sublingual, buccal and inhalation.

** Conjugated estrogen, esterified estrogen, estradiol, estropipate (includes combination products and the following routes of administration: oral, and transdermal).

***Includes oral and injectable (IJ, SC, IM, IV) routes only.

Additional information for calculation of cumulative days supply and average dose:

A. For nitrofurantoin, a patient is included in the numerator if he/she received at least two prescription fills for the medication **and** if the cumulative days supply for any nitrofurantoin product is greater than 90 days during the measurement period.

B. For reserpine, a patient is included in the numerator if he/she received at least two prescription fills for the medication **and** if the average daily dose is greater than 0.1mg.

C. For digoxin, a patient is included in the numerator if he/she received at least two prescription fills for the medication **and** if the average daily dose is greater than 0.125mg.

D. For doxepin, a patient is included in the numerator if he/she received at least two prescription fills for the medication **and** if the average daily dose is greater than 6mg.

E. The cumulative calculation applies to the class of nonbenzodiazepine hypnotics and not for each individual medication. A patient is included in the numerator if he/she received at least two prescription fills for any medication in the class and if the cumulative days supply for any product is greater than 90 days during the measurement period. For example, if a patient received a 30-day supply of zolpidem, a second fill for 30 days supply of zolpidem and then a fill for 35 days supply eszopiclone (all during the measurement period), this would qualify for inclusion in the numerator.

For Average Dose Calculation in B, C and D.

During the measurement period, calculate a daily dose **for each fill** of the dose dependent HRM drug using the following formula: (quantity dispensed x dose)/days supply.

If the individual has two or more fills of a dose dependent HRM drug where the daily dose exceeds **the average dose threshold**, the member is in the numerator

For Cumulative Days Supply Calculation in A and E.

For medications dispensed during the measurement period, sum the days supply, including any days supply that extends beyond the measurement period. All doses dispensed within the measurement period are included in the calculation for that measurement period. For example, for a prescription of a 30-day supply dispensed on December 31 of the measurement period, include the 30-day supply in the cumulative days supply calculation. This days supply would not, however, be included in the following measurement period that stars on January 1 of the following calendar.