Introduction

Green Shield Canada (GSC)'s *Pharmacogenetic Testing and Counselling program* is a cognitive service provided by pharmacists and supported by GenXys Health Care Systems’ TreatGx plus.

*TreatGx* plus is an all-in-one product that includes the myPGx pharmacogenetic test for patients, comprehensive pharmacogenetic reports, and clinician access to the TreatGx clinical decision-support software. TreatGx provides automated tools to help you optimize your patients’ medication therapy and get them on the road to recovery faster. To learn more about GenXys and TreatGx plus, please click [here](#).

The pharmacogenetic test and report

The myPGx pharmacogenetic test includes over 60 genetic variants associated with altered response to more than 150 commonly used medications. The comprehensive reports include information on how your patient’s pharmacogenetic results may affect their response to each medication. Every drug-gene association also includes a level of evidence from the PharmGKB database, as well as references to the Health Canada drug label or clinical studies when relevant.

The TreatGx software

The TreatGx clinical decision-support software includes more than 45 evidence-based treatment algorithms for conditions commonly treated in primary care. Each algorithm uses the most up-to-date evidence and guidelines to offer medication treatment options personalized for your patient based on pharmacogenetics, current medications, comorbid conditions, age, weight, kidney and liver function, and other relevant clinical factors.
See https://www.genxys.com/conditions-and-medications/ for a full list of conditions and medications included in the software.

By testing for specific, clinically actionable genetic variants, in combination with other patient-specific information, TreatGx will help you identify medications and medication doses that are likely to be the safest and most effective for your patient’s specific condition.

**Eligibility criteria**

The program is available to community-based patients who meet all of the following criteria:

1. Have GSC extended health services benefit coverage; and
2. Are currently being treated for moderate-to-severe major depressive disorder and/or anxiety disorder (generalized or social); and
3. Are currently experiencing a lack of response and/or side-effects to their current drug therapy (of adequate dose and duration).

**PROGRAM DELIVERY**

**Identifying eligible patients**

To identify opportunities for pharmacogenetic testing based on the criteria outlined above, you can review your patient prescription profiles, engage patients by phone, or approach them in your pharmacy at their next visit. Plan members can contact GSC’s Contact Centre Services to verify that pharmacogenetic testing is a benefit of their plan.

To engage patients in understanding the benefits of pharmacogenetic testing, the TreatGxplus patient pamphlet may be used to help facilitate discussion and
increase patient buy in. Note that patient participation in the program is voluntary and there is no co-payment or deductible associated with it.

**Preparation and program flow**

Once a pharmacogenetic testing opportunity is identified and the patient has agreed to participate, you will need to:

1. Create an account by visiting [https://cdn.portal.genxys.com](https://cdn.portal.genxys.com) and registering with GenXys to access the TreatGx software.

2. Complete *both* the **GSC prior authorization form** and the **GenXys pharmacogenetic patient consent form** found on [providerConnect®](https://cdn.portal.genxys.com).

   **GSC prior authorization form:** Please refer to *Appendix A – Pharmacist Resources* for the complete Patient Health Questionnaire Nine-item Depression Severity Scale (PHQ-9) and/or the Generalized Anxiety Disorder Seven-item Severity Scale (GAD-7).

3. **Fax the completed prior authorization form to GSC** on behalf of your patient and fax the completed and signed **pharmacogenetic patient consent form directly to GenXys at 1.855.910.0813**. (If approved by GSC, the patient will receive a **promo code including** details on how to order the test and submit their DNA sample.)

4. When the results of the pharmacogenetic test are ready, the patient will be notified by email, and you, as the patient's health care provider will receive a faxed summary report, along with an email notification if you have a TreatGx account.
5. After receiving their myPGx test results, patients can log in to their patient account to invite additional health care providers to view their results and use the TreatGx software.

6. You can use your account to access the patient’s profile, including their pharmacogenetic test report and recommendations, to create personalized and optimized medication options.

7. Meet with the patient to review the pharmacogenetic test results and suggest any necessary therapy changes.

8. If applicable, make recommendations to the prescriber to optimize the patient’s drug therapy based on the pharmacogenetic insights. To help facilitate communication with the prescriber, use of the Physician Communication Form is recommended. Please ensure the patient is aware the communication is taking place.

9. To receive reimbursement for pharmacogenetic counselling, submit the product identification number (PIN) 992313 (Pharmacogenetic Counselling) to GSC for payment.
**REQUIREMENTS**

**Education and training**

There is no required formal training program; however, it is GSC’s expectation that participating pharmacists feel reasonably competent utilizing pharmacogenetic insights with support from the TreatGx clinical decision support software.

For additional resources and access to live and pre-recorded educational webinars developed by GenXys, please click [here](#).

**Program forms and documentation**

Documentation must be clear and complete to support adequate patient care and follow-up as well as payment for the service provided to the patient. Forms are available on providerConnect® to aid in physician communication (if required); however, you are permitted to use your own forms to facilitate physician communication if you prefer.

**Medication Assessment Form:** If required, you will obtain an accurate medication history for the purpose of evaluating drug therapy to aid in the identification of potential pharmacogenetic testing and counselling opportunities.

**Physician Communication Form:** This form can be used to engage with and communicate recommendations to the patient’s physician and to ensure agreement with any recommended therapy changes. Ensure the patient is aware the communication is taking place and is documented on the pharmacy copy.

You may attach additional pages to complement any/all of the forms to ensure continuity of care. For example, you may choose to attach a medication profile generated using the pharmacy’s software or the Medication Assessment Form to
support/complement the *Physician Communication Form*. It is GSC’s expectation that participating pharmacists provide proof of completed documentation should an audit be performed for submitted claims.

**Privacy**

All third parties delivering services on behalf of GSC will agree to comply with provincial privacy legislation and regulations, including the following terms and conditions with respect to privacy:

- Name an individual to handle all aspects of privacy
- Identify the purposes for the collection of personal information
- Seek consent for the collection of personal information and its subsequent use or disclosure
- Limit the use of all personal information collected to the purposes for which it was collected
- Retain information for as long as required for the purposes of this program
- Ensure that all retained information is accurate
- Use appropriate security measures to protect all personal information
- Ensure that, upon request, an individual will be informed of the existence, use, and disclosure of their personal information and will be given access to that information
- Inform individuals who make inquiries or lodge complaints of the existence of, and process for, complaint procedures
- Acknowledge liability for the use made of all personal information
- Allow GSC to oversee the third parties’ methods of collecting and storing data (by review or audit)
- Indemnify GSC for any breach of contract
Claim for payment

A claim for payment can be made online only after pharmacogenetic counselling has been provided to the patient. For audit purposes, claims are made on the day the service is provided. When transmitting the claim on our network, the charge for the service provided needs to be entered in the cost field, and the dispensing fee field must be left blank as dispensing fees do not apply to this benefit. The claim submission follows the normal process for submitting claims to the GSC network using product identification numbers (PINs).

<table>
<thead>
<tr>
<th>PIN DETAILS</th>
<th>REIMBURSEMENT AMOUNT</th>
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<tbody>
<tr>
<td>992313: Pharmacogenetic Counselling</td>
<td>$35</td>
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Please ensure you are submitting the correct PIN to support accurate reimbursement. GSC will provide reimbursement for a maximum of one claim per patient per lifetime. PINs submitted in excess of the maximum will not be permitted.

Recordkeeping

All documents used to collect and document personal health information during the provision of this program are considered part of the patient record and will be maintained in a computer system where possible. Where that is not possible, documents must be stored in a systematic manner that allows for their easy retrieval and for the period of time specified by the applicable regulatory college-of-pharmacy requirements. For quality assurance purposes, claims may be subject to audit. Please retain all completed documentation for the period of time required by your regulatory body as described above.
1. **How do I determine whether my patient has pharmacogenetic testing as part of their benefits plan?**

   If the patient is unsure about coverage under their benefits plan, encourage them to check their benefits booklet or contact GSC’s Contact Centre via [email](mailto:) or by calling 1.888.711.1119.

   Alternatively, the patient may be able to use their health care spending account (HCSA) or pay out-of-pocket if they are not eligible for pharmacogenetic testing under their health benefits plan. Encourage them to visit [https://www.genxys.com/en-gsc-members/](https://www.genxys.com/en-gsc-members/) for additional information and details on ordering.

2. **I have determined that my patient can benefit from a drug therapy change. How do I verify coverage for a drug before I make a recommendation to the prescriber?**

   Patients can verify coverage for their drug benefits by using the “Drug Coverage Search” feature found on the [GSC everywhere website and mobile app under Your Health Benefits](https://www.genxys.com/en-gsc-members/).
3. Can I provide this service remotely (i.e., via phone or videoconference)?

Recognizing the role of virtual health care during the COVID-19 pandemic and more importantly going forward, GSC is adapting our programs to allow virtual delivery of services. This includes our Cardiovascular Health Coaching, Smoking Cessation Program, Pharmacist Deprescribing Program, and Pharmacogenetic Testing and Counselling.

Canada’s pharmacy regulatory bodies and professional associations have issued guidance documents defining the use of virtual services. Pharmacists should contact their applicable provincial college or association for details. It is GSC’s expectation that pharmacies will follow their regulatory college guidelines in the delivery of GSC programs.

Pharmacists can assess the most appropriate way to deliver the cognitive services, using virtual care when it is not practical or advisable for the patient to receive services in person. The delivery method and rationale should be documented with each session delivered virtually. This documentation is subject to verification.