**Personalize Your Healthcare with Pharmacogenetic Testing!**

 [Betty Chaffee](https://bettermymeds.com/author/bjc2018/)/  August 25, 2018/  [Medication Management](https://bettermymeds.com/category/medication-management/), [Personalized Medicine](https://bettermymeds.com/category/personalized-medicine/), [Pharmacogenetics](https://bettermymeds.com/category/pharmacogenetics/), [Precision Medicine](https://bettermymeds.com/category/precision-medicine/)/  [0 comments](https://bettermymeds.com/2018/08/25/personalize-your-healthcare-with-pharmacogenetic-testing/#respond)

**Pharmacogenetics** (PGx)-- the study of how genetics affects a person's response to drugs -- is an exciting new field in healthcare. In the [third article of this series](https://bettermymeds.com/2018/08/17/the-exciting-role-of-genetics-in-personalized-medicine/)on Personalized Medicine, we talked about the nuts and bolts of PGx and why it can improve the treatment of some health problems. To recap, genetic differences can change the way people respond to medication. The result? Some people get little or no effect from a certain drug, while others may suffer severe side effects. Pharmacogenetic testing allows you to learn how your genetic makeup may affect your response to drugs. With that information, medications can be tailored to your needs more than ever before. In this article we'll talk about practical issues of testing.

**First, WHO should consider pharmacogenetic testing and WHY?**

****The short answer is: Anyone who feels that personalized medicine is important to their health. A recent research study found that *less than 10% of those tested had normal function of all five commonly-tested enzymes*, and that nearly 25% of people were taking at least one medication that could be affected by these changes. And the more medications one takes, the higher the likelihood that genetic variations  will be important. The Food and Drug Administration of the government (FDA) has recommended genetic testing prior to starting treatment with several medications and has given guidance about testing for nearly 150 others. And research will continue to give us information about genetic differences in drug responses. Without any genetic information, though, doctors will need to prescribe medications using the old method of trial and error - starting a medication that might not work well or may cause side effects. PGx information helps doctors prescribe the *right* drug at the *right* dose, the *first* time.

**Next, WHEN is the right time for pharmacogenetic testing?**

****PGx testing can be done after a new diagnosis is made but before a medication is started. But is that the best timing? Waiting until treatment is needed may result in a delay in treatment. Some PGx experts suggest that having test results already in hand When a person receives an unexpected diagnosis might be a better idea. It would allow the doctor to confidently prescribe the best medicine right away without waiting for test results. And the great thing about PGx testing is that *results last a lifetime*. since genetic makeup doesn't change. PGx test results will still be valid when a new diagnosis is made in the future OR when a new medication is marketed that shares the metabolic pathways of others. So on that day when a new diagnosis is made and treatment is required, wouldn't it be great to already have the information that will allow your doctor to prescribe the *right* drug, at the *right* dose, the*first* time? Having test results *prior* to the need for drug treatment may be the most efficient way to put PGx into action, and make your healthcare more personal!

**WHAT type of test?**

Several types of PGx tests are currently available. A single gene test can determine if a particular medication can be used. Then there are multi-gene tests, called "panels", which test several genes. Some panels test a small number of genes based on a person's current medication regimen or health problems. Other panels are broader, testing most of the genes that affect the metabolism and transport of medications.

Typically, a healthcare provider is in charge of ordering, performing, and interpreting pharmacogenetic tests. In 2018, though, the FDA approved  [a PGx test](https://www.23andme.com/test-info/pharmacogenetics/) that is marketed directly to consumers. The testing process for direct-to-consumer tests is simple, but interpreting and using is likely to be a stumbling block for most consumers.

To get the most from a pharmacogenetic test, use a test recommended by a professional on your healthcare team. By doing that you'll ensure that the results will be interpreted by an expert and be ready for use quickly. And if you want information that'll be useful both now and later, a broad-spectrum PGx panel like the [RightMed® test from OneOme](https://oneome.com/patient%22%20%5Ct%20%22_blank) is a great choice.

**Finally, WHERE and HOW is the test done?**

Pharmacogenetic testing is available at some clinics, hospitals, community pharmacies and Medication Management Services. But the type of test (single-gene, specific gene panel, or broad-spectrum panel) will vary from place to place.  ***BetterMyMeds*** is ready to help with a broad-spectrum PGx test kit that will provide information to help you now and into the future.  [**Learn more.**](https://bettermymeds.com/pharmacogenetics-testing-services/)

The testing process is simple. First you'll ask your doctor to write an [order for the test](https://bettermymeds.com/wp-content/uploads/2020/03/OneOme-PGx-test-ordering-template.docx). Then you'll take the cotton swab from your test kit and rub it along the inside of each cheek to collect cells containing genetic information. We'll seal the swab inside a protective container and send to the lab. Results should be available in about a week; you can see a sample report [here](https://www-bg2d96gu-staging.s3.amazonaws.com/media/documents/sample_US_RMComprehensive_Report_03.04.21.pdf).

***The best way to get a clear understanding of the results is to meet with a pharmacist certified in interpreting PGx test results.*** When you work with *BetterMyMeds* for your pharmacogenetic testing needs you'll get a written report clearly explaining your results. We'll also provide a copy of the results for you to share with your doctor and your medical record.  More information about PGx testing services from *BetterMyMeds* can be found [here](https://bettermymeds.com/pharmacogenetics-testing-services/).

**It's up to you!**

The [**second article of this series**](https://bettermymeds.com/2018/07/26/what-makes-personalized-medicine-so-personal/) focused on the importance of good communication between patients and their healthcare providers. If you feel that pharmacogenetic testing is right for you, or for someone in your family, it's up to you to discuss it with your prescriber. Bring up the issue, explain your concerns, and request a written order to perform the test. It may not be a priority for your prescriber unless he or she knows it's a priority for you!

**Make your healthcare personal!**



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