

# Pharmacogenomics and You

## Fact Sheet

### Pharmacogenomics (far ma-ko-jen-om iks)

Pharmacogenomics is defined as the study of how heredity affects your response to certain drugs you are taking. It is about your genes and your drug response.

This test can provide information about several commonly prescribed medications. Your provider will consider all of the factors specific to you when making decisions on medication therapy. Having your genetic information about how your body processes medications can help your doctor make clinical decisions for your care.

Sanford Health offers a set of genetic blood tests that can provide your doctor with this information. After you have this genetic test, the results are available in your medical record. If your doctor prescribes a medication affected by your genetic information, the electronic medical record will help them decide which medications may work best for you.



### What is Personalized Medicine?

Personalized medicine helps to define the best therapy and the right dose for your illness. A blood test may help define which medicine may work best for you.

- This blood sample will be tested to find out how your body processes medication.
- This information is important to your doctors because it may change the medication they prescribe to ensure the best possible results for you.

### Another piece of the puzzle

Genetic testing may help doctors develop a treatment plan specific for you.

For some commonly prescribed medications, the results of your genetic test may help your doctor decide:

- Which medication may work for you with the least side effects
- What dose of medication may be best for you

**Do not** make changes to your medications without talking to your doctor first.

### The Best Treatment



Patient A may see best results with **2 tablets** of a medication.



Another person, Patient B may only need **1 tablet** for their treatment.



A third person, Patient C will only need **one-half of a tablet** of this same medication.



A different person, Patient D, may need to take **a different drug** to see the same benefits as the previous 3 patients.