

Testimony Prepared for Legislative Hearings on  
Establishing a Pharmacogenomics Experts Task Force

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Good afternoon, Madam Chair and distinguished Committee Members. My name is Pamala Jacobson and I am a pharmacist and a professor at the University of Minnesota. I co-lead a University Grand Challenges Initiative that is looking at how pharmacogenomics could be used in Minnesota as a tool to improve medications.

Pharmacogenomics is the science of using an individual's DNA to predict how effective or toxic a medication will be for them. We already follow this precision medicine approach in cancer: we do genetic testing of the cancer, and then anticancer medications are tailored to match the tumor genetics.

Every one of us has taken medication. And four out of five of us has an inherited genetic variant that could affect how effective or safe a medication could be. Here's an example. Clopidogrel (or Plavix) is used to prevent heart attacks and stroke. But between 40 and 50 percent of East Asians and Pacific-Islanders have a gene variant that makes Plavix less effective. In February of this year, the manufacturers of Plavix were ordered to pay the state of Hawaii more than \$834 million for failing to warn consumers about the risks of Plavix—a significant portion of whom have this ancestry.

While a handful of organizations across the country now use pharmacogenomics, no state has yet undertaken comprehensive evaluation or implementation. And most Minnesotans do not have access to pharmacogenomic-guided care.

As I mentioned, we are leading an initiative to advance the equitable implementation of pharmacogenomics in Minnesota. Our efforts developed from a small University group to a multi-institutional group. All are excited about collaborating to bring pharmacogenomics to the state or to use this technology to benefit their own patients.

But while it seems it may not be necessary to have State involvement to bring together a group, there is a limit to what *we* can do without an ***endorsement and mandate***. That is why we ask for this measure to be passed and provide authorization for a task force of experts to deliver a clear and data-informed report on the benefits, opportunities and challenges of pharmacogenomics, and a roadmap for scaling it up equitably.

Thank you Madam Chair and distinguished Committee Members.