Genetic sequencing offers promise of individualized medicine, but at what cost?

Whole genome sequencing has officially entered the medical mainstream and kicked off an era of truly personalized medicine.

California-based Illumina is now selling high-throughput sequencing equipment that will deliver a patient's entire genetic blueprint for about \$1,000. That's down from about \$2.7 billion for the first human genome just 11 years ago.

Whether the technology can reduce health care costs depends on how we choose to use the information and whether the targeted treatments promised are affordable.

Brad Popovich, chief scientific officer of Genome British Columbia, foresees a time in the not-too-distant future when all babies will have their genome sequenced at birth, much as we do now with blood tests for a handful of common and rare diseases. As many as three million Canadians could develop a rare disease during their lifetime and many of those need never become ill.

"There are targeted therapies or lifestyle changes you can make to modify that risk," he said.

Read the full, original story: Genome sequencing: A costly way to save