

THE PRECISION MEDICINE INITIATIVE®



WHAT IS IT?

Precision medicine is an emerging approach for disease prevention and treatment that takes into account people's individual variations in genes, environment, and lifestyle.

The Precision Medicine Initiative® will generate the scientific evidence needed to **move the concept of precision medicine into clinical practice.**

WHY NOW?

The **time is right** because of:

Sequencing of the human genome

Improved technologies for biomedical analysis

New tools for using large datasets



NEAR-TERM GOALS

Intensify efforts to apply precision medicine to **cancer.**

Innovative **clinical trials** of targeted drugs for adult, pediatric cancers

Use of **combination therapies**

Knowledge to overcome **drug resistance**



LONGER-TERM GOALS

Create a research cohort of **> 1 million American volunteers** who will share genetic data, biological samples, and diet/lifestyle information, all linked to their electronic health records if they choose.



Pioneer a **new model for doing science** that emphasizes **engaged participants, responsible data sharing, and privacy protection.**

Research based upon the cohort data will:

- Advance **pharmacogenomics**, the right drug for the right patient at the right dose
- Identify new targets for **treatment and prevention**
- Test whether **mobile devices** can encourage healthy behaviors
- Lay **scientific foundation** for precision medicine for **many diseases**



Follow the Initiative's progress and consider volunteering for this landmark effort.

www.nih.gov/precisionmedicine