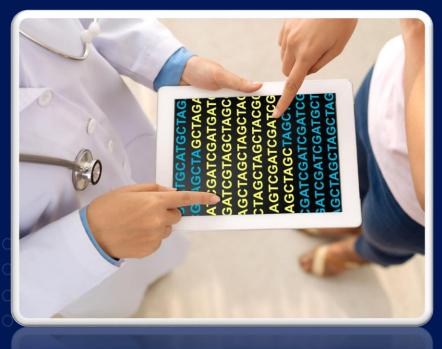# Genomics in Medicine & Health: Vision

To integrate genomics into routine medical practice in a way that prevents disease and improves the health of all members of a diverse community by engaging patients, their families, and the entire healthcare team in genomic health care.

1. Create systems to integrate genomics into everyday clinical and public health practice

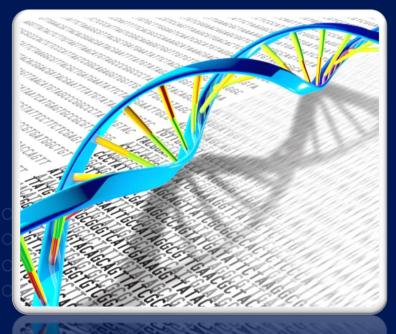## What is needed to use genomics in medicine and health?

- Create systems to connect genomics to point-of-care clinical decisions

- Leverage broad genomic data rather than individual genes and variants

- Support iterative use of genomics as a lifetime healthcare resource

2. Improve processes for routine, high-value clinical genomic testing

What is needed to make genomic tests accurate, easy to use, and understandable?
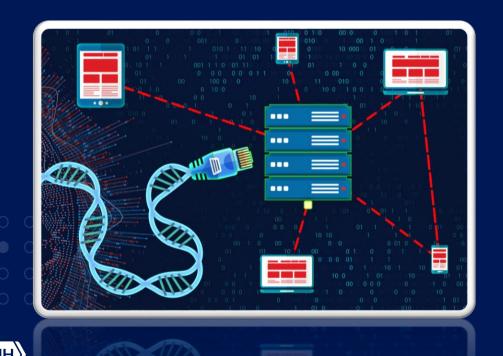

- Optimize tests for the clinical setting

- Develop robust standardized sampling, consenting, data interpretation, and return of results

- Reduce cost

3. Build knowledge bases for predictive genomic medicine

What do we need to know to tell any patient their risk of disease based on genomic testing?

- Establish the clinical relevance of variants

- Improve predictive algorithms and tools

- Share knowledge from diverse populations globally

4. Develop and evaluate genomic prevention and therapeutic strategies

How can health improvements from the use of genomics be demonstrated?

- Assess clinical/personal utility of genomic prevention and therapeutic strategies

- Select when to screen and undergo management changes

- Integrate genomic, environmental, and behavioral variation

5. Ensure that genomics has maximum utility for all members of the public

How do we make sure genomics is available and useful for all?

- Mitigate disparities

- Gage effectiveness from the patient and provider perspectives

- Assess what information the public needs make health choices

6. Train healthcare providers to integrate genomics into the clinical workflow

What training is needed to use genomic information for medicine and health?

- Make the best use of teams, systems, data, and tools to integrate genomics

- Address questions related to optimal training

- Foster communications amongst healthcare professional teams

Genomics in Medicine & Health

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