

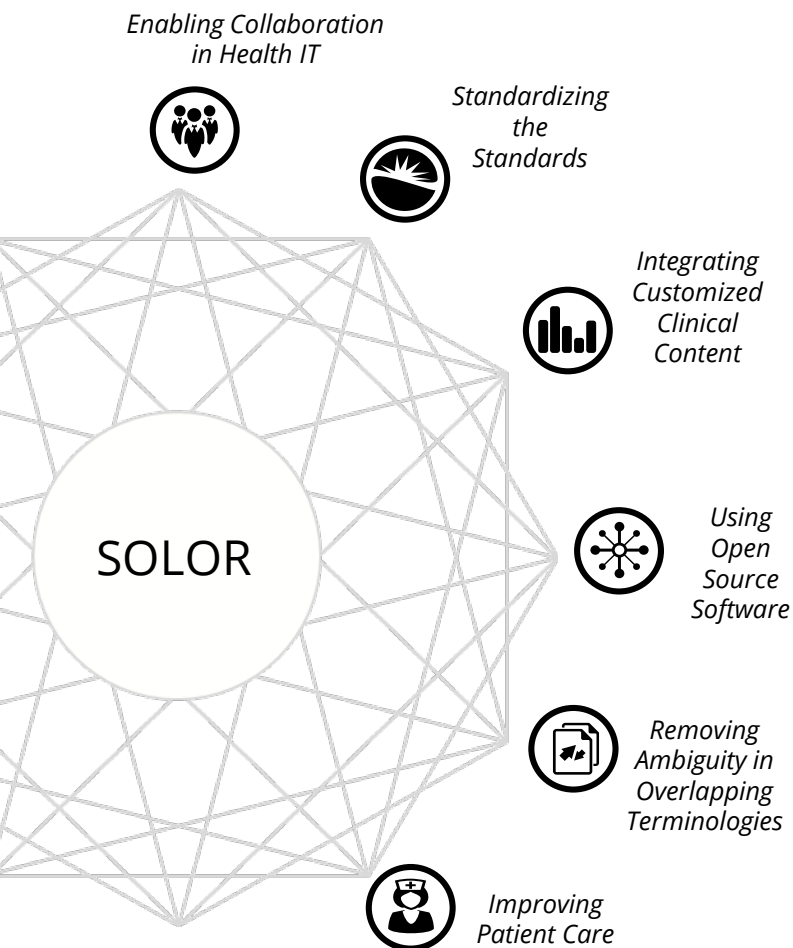
**SOLOR Demo**  
*System of Logical Representation*  
Deloitte Interoperability Summit



## **The Current Health Terminology Landscape**

Today, healthcare systems do not represent their clinical data in the same way. This leads to clinical terminology that overlaps, conflicts, and/or has gaps, leading to erroneous clinical decisions based on incomplete or inaccurate information.

# System of Logical Representation



SOLOR provides an open source ecosystem to assimilate disparate health standards into a consistent representation.

**SOLOR awarded the FedHealthIT 2018 Innovation Award**

June 2018

**Dr. Keith Campbell selected for the OSEHRA Lifetime Achievement Award**

July 2018

**HSPC highlighted SOLOR as mission critical at the HSPC 17<sup>th</sup> General Meeting**

July 2018

# What can SOLOR do?

## **ENABLE EASIER SUSTAINMENT**

SOLOR streamlines the integration of standards, reducing the time and money required to sustain them.

## **ENABLE EASIER DEVELOPMENT**

SOLOR allows developers to focus on product development, rather than continuously re-integrating disparate terminology standards after every update.

## **IMPROVE PATIENT SAFETY**

SOLOR eliminates the time-consuming, labor-intensive, and error-prone efforts to untangle overlapping and incoherent standards, decreasing risk of patient harm from ambiguity.

## **FACILITATE INTEROPERABILITY**

SOLOR allows providers, medical professionals, researchers, and health IT specialists to share clinical content and maintain meaning for interoperability across the healthcare ecosystem.

**ENABLES BETTER, FASTER, SEAMLESS CARE**

**PRODUCES CONSISTENT SEMANTICS TO BE EASILY SHARED**

**IMPROVES THE QUALITY AND SAFETY OF HEALTHCARE**

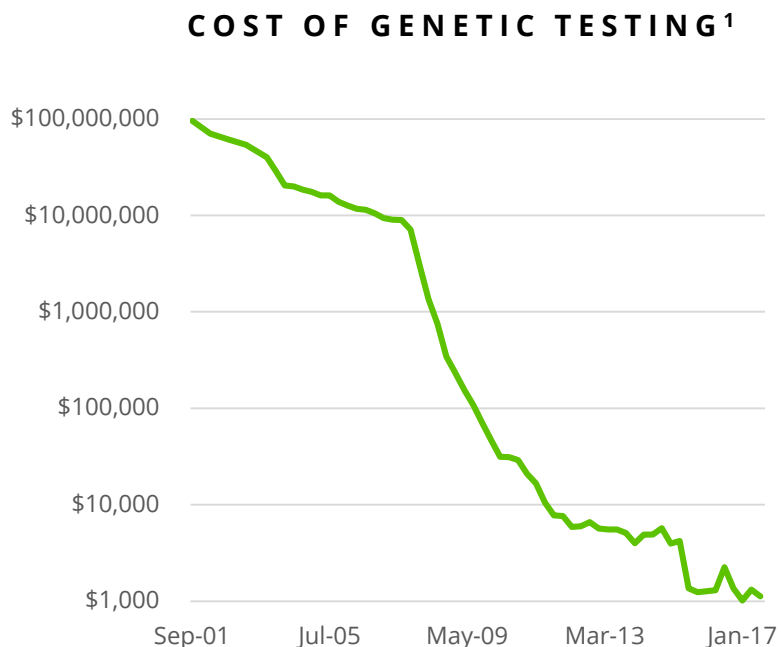
The background of the slide is white with various light blue brushstrokes and shapes scattered across it. These include horizontal and diagonal strokes of varying lengths and thicknesses, as well as several circles and ovals. The strokes have a soft, painterly quality with slightly irregular edges.

# **SOLOR In Action**

Applying SOLOR to Precision Medicine

# SOLOR Use Case: Precision Medicine

As the cost of genetic testing continues to decrease, genetic information is becoming a more common addition to an individual's health records



<sup>1</sup> <https://www.genome.gov/27565109/the-cost-of-sequencing-a-human-genome/>

**> 3**

**MILLION**

genetic variations  
reported to date

**~ 1-1.3**

**THOUSAND**

available genetic tests for

**~ 2.5**

**THOUSAND**

conditions

**GENOMIC INFORMATION  
IS VALUABLE FOR:**



## **Treatment**

Genetic testing can lead to more effective treatment for patients



## **Basic Research**

Genetic testing results can provide valuable ref sets for basic science



## **Clinical Research**

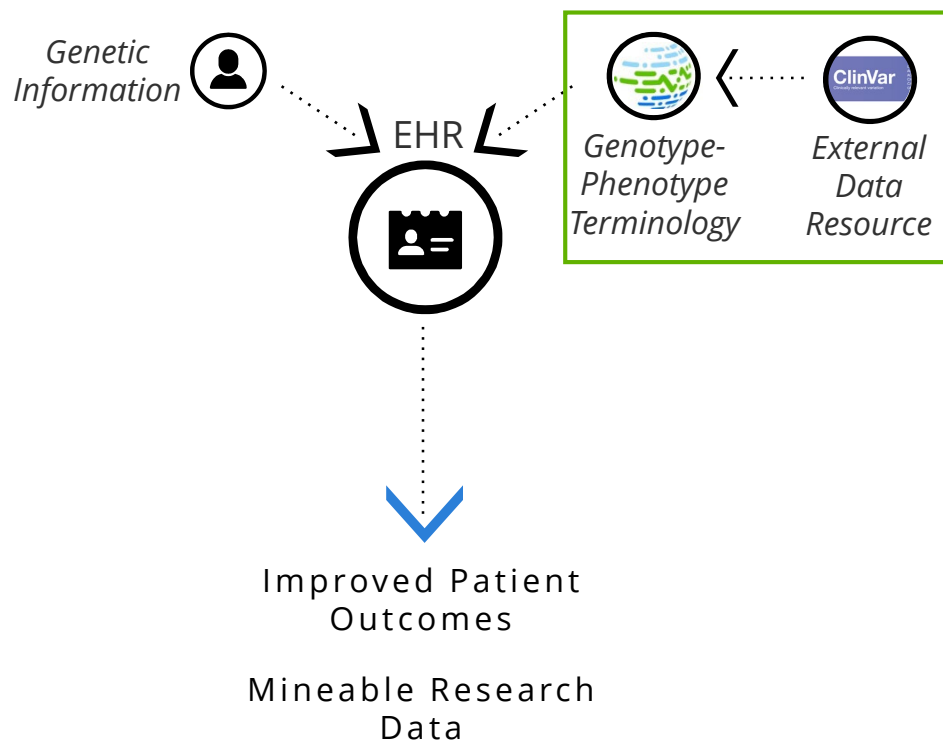
Genetic testing results will enable researchers to perform large scale data analytics

This data is not structured or maintained in the EHRs in a format useful for clinical decision support, research, or interoperability.

# The SOLOR Content Integration Process

The SOLOR Genomic Extension transforms concepts from ClinVar, establishing a relationship between a desired variant and a SNOMED concept.

## Genotype-Phenotype Content Integration



## SOLOR Content Integration Template

