



# Accelerating health care innovation and discovery

OptumLabs™ is an open, collaborative research and innovation center dedicated to improving patient care and patient value. Our goal is to accelerate high-impact discovery through data-driven health care research, leading-edge data science and the power of collaboration.

At our core is a collaborative of over 20 health system stakeholders sharing diverse perspectives, data expertise and a passion to transform health care. These stakeholders leverage our collaborative environment, robust data assets, advanced data science techniques and analytic tools to extract real world insights that translate into innovations and improvements in care.

What makes OptumLabs unique is our fusion of powerful partner collaborations, deep health care data expertise and leading-edge data science.

## Powerful partner collaborations

- Our diverse partners work together to generate new problem formulations, new approaches and new discoveries.
- Our partners conduct research and discovery across an array of topics, such as health care utilization, disparities, economics and value, patient safety and complex conditions. We use our broad range of scientific and medical expertise to design studies for relevance to clinical practice, policy and beyond.

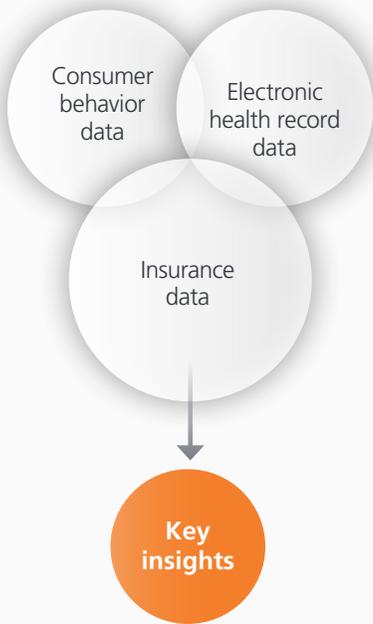
## Our partners



## Deep health care data expertise

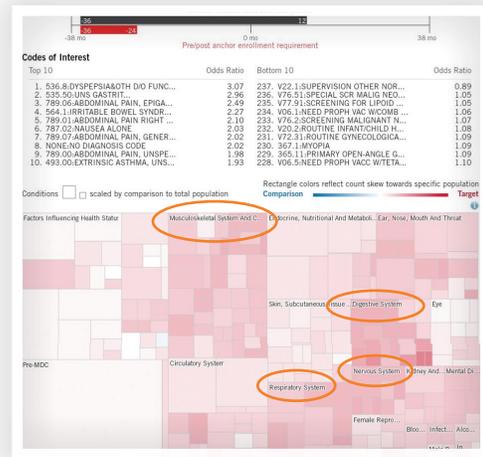
- Our comprehensive real-world data with over 160 million de-identified lives across claims and clinical information contains a rich, linked dataset which we use to conduct broad or narrow investigations on populations and unique subsets within them.
- Our deep expertise working with complex, evolving health care data, and our proprietary data exploration tools enable our partners to extract rich insights iteratively and efficiently.

### Largest linked dataset



>160 million de-identified lives

### Proprietary data exploration tools

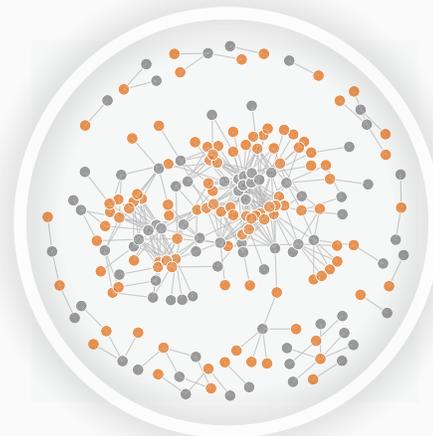


Natural History of Disease (NHD) is a powerful exploratory tool that can quickly and accurately navigate a rich database of tens of millions of de-identified lives with full access to claims data.

## Leading-edge data science

- We are skilled in understanding and applying traditional and novel analytic methods to health care data to facilitate data-driven discovery and modelling solutions.
- Together with our partners, we explore the best ways to extract clinically sound insights from data using a range of data science techniques, including natural language processing and machine learning.

### Novel analytic methods



## What's possible at OptumLabs

Our collaborative offers opportunities for exciting breakthroughs. Current initiatives include:

**Scientific discovery.** Researchers are leveraging our longitudinal, real-world data to identify and compare treatment effects among different patient populations — such as the impact of driving tight glucose control on rates of hypoglycemia in complex patients among those with type 2 diabetes. Such evidence may lead to more care personalization and better outcomes.

OptumLabs regularly publishes research outcomes in high-impact, peer-reviewed journals. These include BMJ, JAMA, Chest, Journal of the American Heart Association and Value in Health.

**Performance measures.** OptumLabs is advancing measurement science, exploring opportunities for measure innovation and demonstrating the value of measurement to improve population health. Collaborations with multiple partners are addressing the domains of



complex, co-morbid conditions, Alzheimer's and the homebound. As a new CMS Qualified Entity (QE), we will publicly report on a broad spectrum of measures to inform population health improvements.

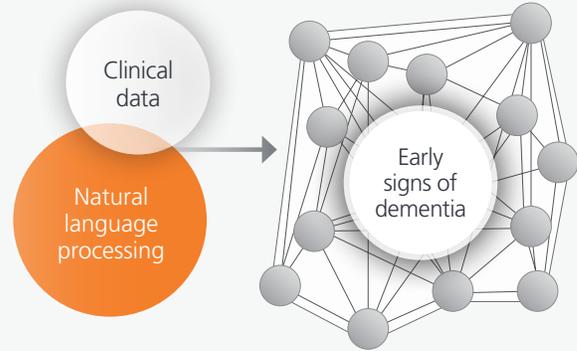
**Predictive models.** OptumLabs is tackling major health care issues through integrated research and translation programs. A collaboration with the Global CEO Initiative on Alzheimer's disease is leveraging clinical data through natural language processing to identify early signs of dementia and predict the onset of Alzheimer's disease.

**Health care cluster analysis.** Data scientists, researchers and clinical experts can collaborate at OptumLabs to design and develop patient clusters to facilitate personalized care management.

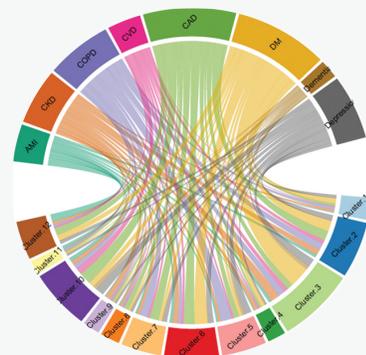
### Scientific discovery



### Predictive models



### Health care cluster analysis



**Data-driven innovation.** OptumLabs has developed a curated data set, Optum® CommunityHealth, that tracks nearly 100 health metrics in more than 300 communities nationwide. The dataset facilitates a deeper understanding of variations in care, spending and outcomes to inform targeted, value-based interventions for organizations trying to improve health outcomes for employees and reduce cost.

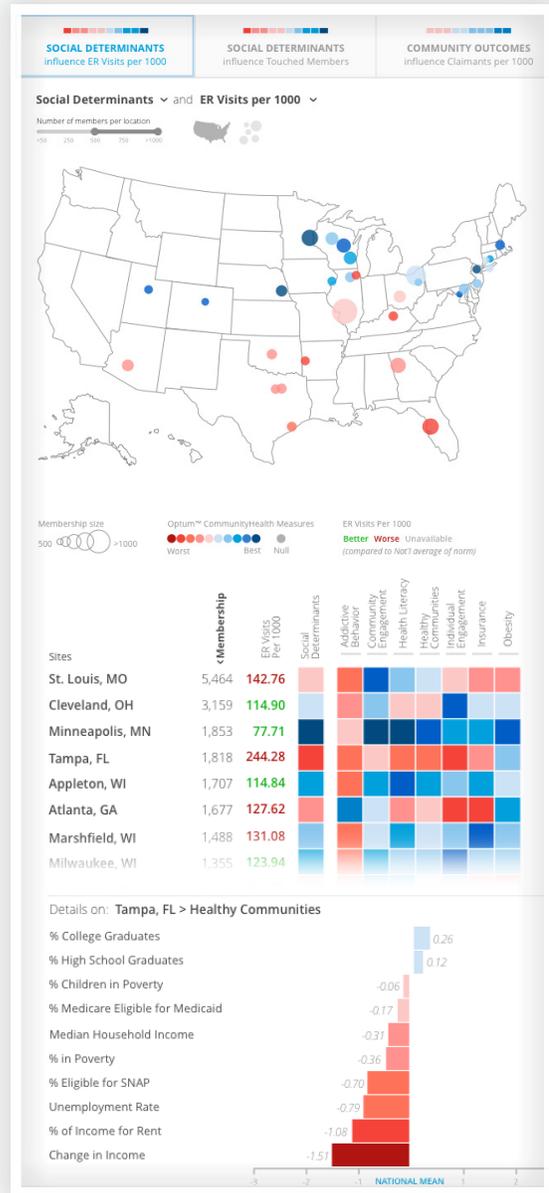
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**Convening thought leaders.** OptumLabs regularly convenes thought leaders from among our partners and across the health industry to share new ideas and work collaboratively on data driven initiatives. Partners attend a variety of OptumLabs forums, including webinars to share science and discovery ideas and leadership insights, our signature Research & Translation Forum to showcase work underway in our collaborative, and partner round tables designed to help advance the data agenda in the UK and Europe.

## Driven by data. Powered by partners.™

OptumLabs is headquartered in Cambridge, MA, and has additional offices in San Francisco, CA, and London, UK. For more information visit [optumlabs.com](http://optumlabs.com).

## Data-driven insights on community health



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