

From recruitment to real-world impact

Renown Institute for Health Innovation (Renown IHI) has partnered with Helix on a clinically-actionable disease screening and research initiative aiming to sequence and screen 250K people.



THE HEALTHY NEVADA PROJECT

Renown IHI's Healthy Nevada Project aims to improve clinical care as well as accelerate basic and translational research. As part of this, they're returning clinical results to participants and their healthcare providers for three highly actionable but often missed conditions: hereditary breast and ovarian cancer syndrome, Lynch syndrome, and familial hypercholesterolemia.

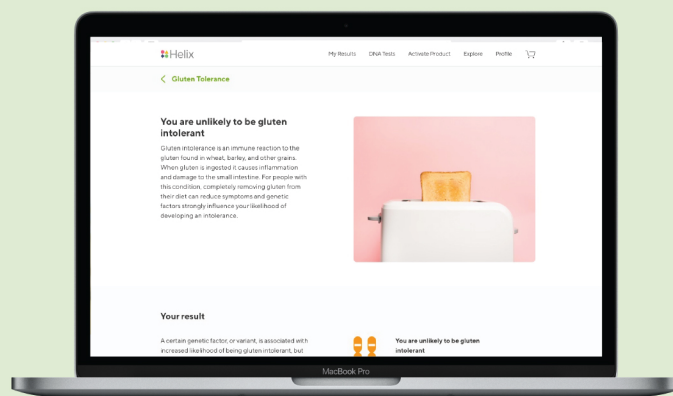


250k
Nevadans



THE PARTNERSHIP

Renown IHI is working closely with Helix to customize its end-to-end population health solution. Helix's in-house clinical and scientific expertise, clinical-grade Exome+® assay, and next-generation sequencing lab (one of the world's largest) provided this project with powerful tools that helped it become one of the largest health-system driven, clinical-grade population genomics initiatives.



Helix's end-to-end solution is powering one of the largest and fastest growing population genomics initiatives in the United States



CLIA/CAP next-generation sequencing lab



Versatile Exome+[®] assay



Participant-facing engagement tools



Sequence Once, Query Often[™]

THE RESULTS

In less than one year, Renown IHI has assembled one of the largest genomic and clinical data sets in the world and changed the standard of care in their community.

10,000

sign-ups in the first 4 days

>20,000

people recruited, sequenced and given results in less than 6 months

40%

of participants new to Renown Health became patients within 6 months of signing up

1 in 75

participants received actionable medical results

90%

of those with actionable results would have been missed by current clinical guidelines

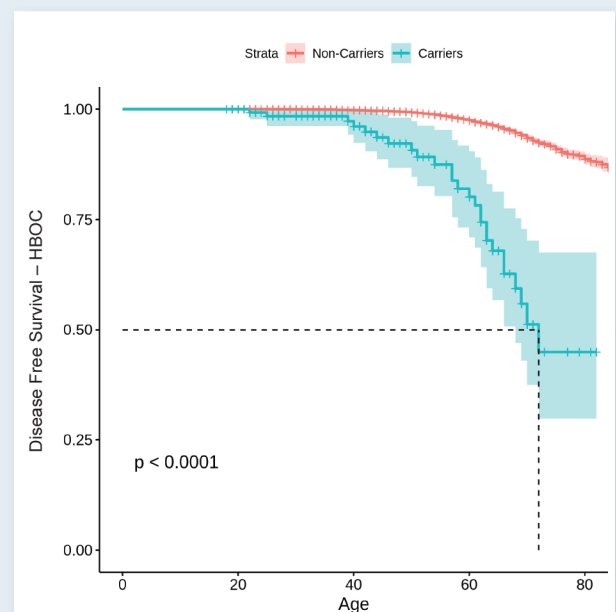
22%

of those with actionable results had already developed indications of disease

SIGNIFICANT ACCELERATION OF DISEASE IN PARTICIPANTS WITH ACTIONABLE MEDICAL RESULTS

Relative to participants with no actionable medical results, participants with actionable medical results were found to have an accelerated onset of disease, with disease development appearing after the age of 40 (90%) and before 65 (70%). Yet 90% of these participants were missed by current guidelines and less than 20% had any documented suspicion for inherited genetic disease in their medical records. Broader genetic screening can help to close this gap.

Acceleration of disease onset



Carrier for HBOC pathogenic variants show accelerated onset of disease Grzymalski et al, Nature Medicine, 2020