



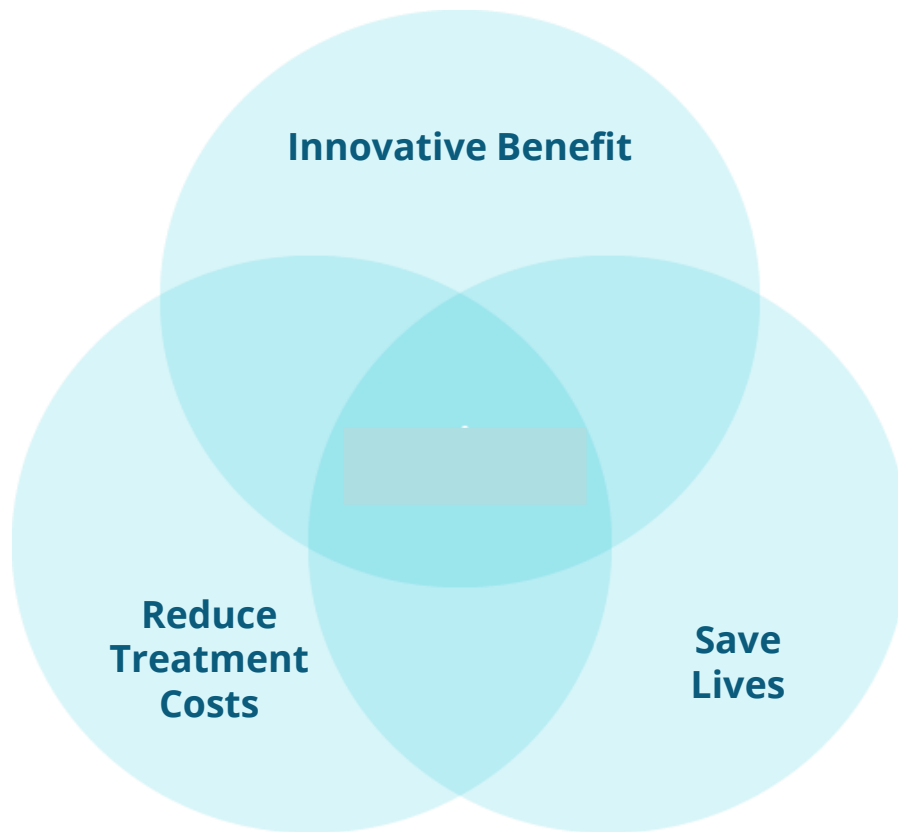
# Preventive Health through Genetics: The New Company Health Benefit

For early detection and prevention of disease

January 25, 2018



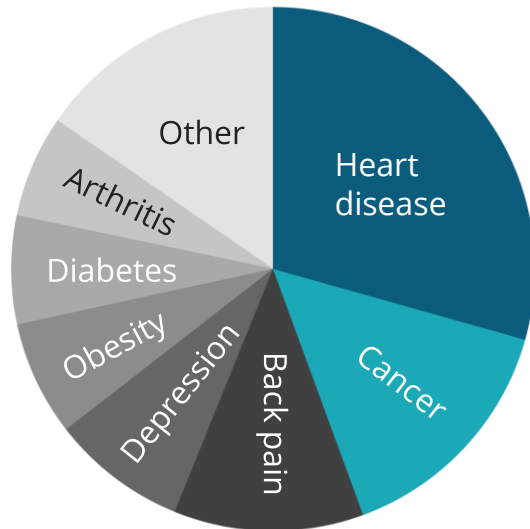
# Why organizations are integrating genetic testing into their benefits platform



# On average, heart disease and cancer are the most expensive medical conditions for employers

**Heart disease and cancer are the leading drivers of medical cost for employers...**

Annual productivity and medical costs for average size employer (10K ees)



**...but minimal spend is focused on prevention**

**>\$1.1T**

estimated national expenditure of cancer and heart disease for 2016

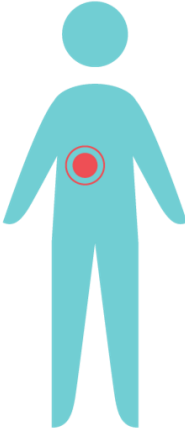
**<3%**

of health care spend is spent on prevention

Personalized medicine has used genetic testing for ~20 years



Classic PGx  
(pharmacological  
genetics)



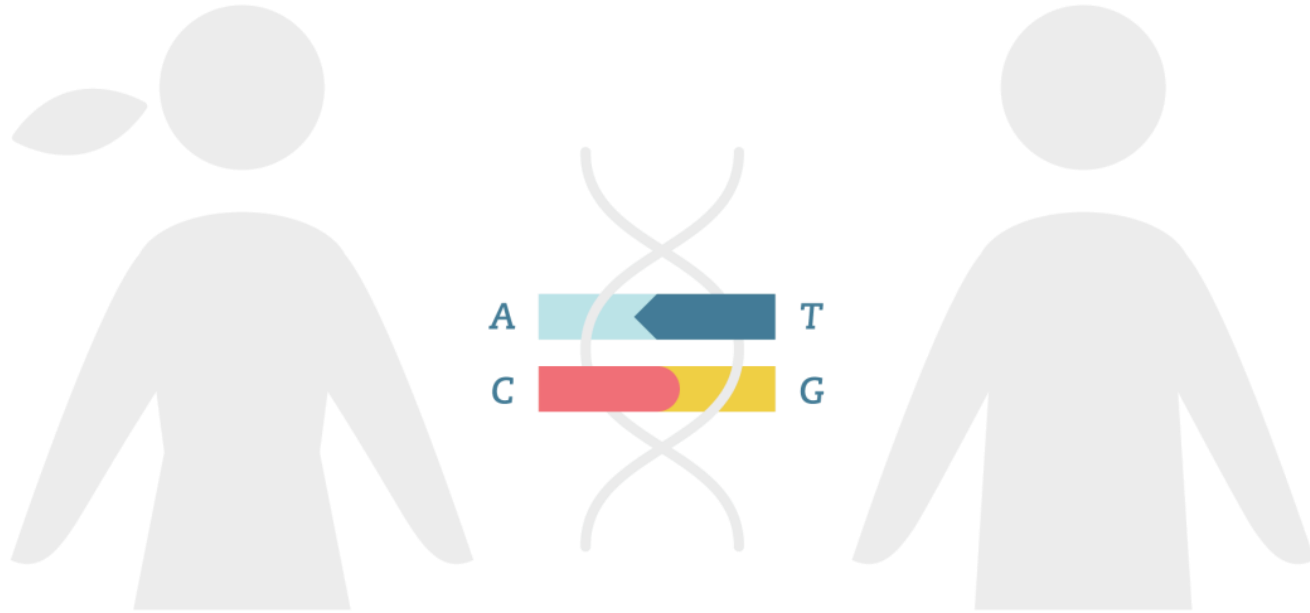
Molecular  
Oncology

color



Inherited  
Disease Testing

# Genetic information is the key to prevention



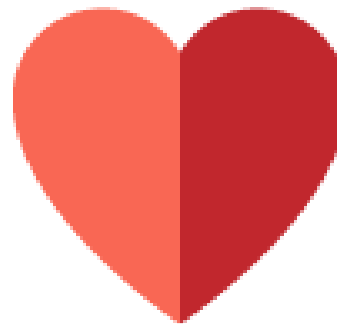
Prioritizing high-impact genetics where mutations may significantly increase the risk of cancer and the information is actionable.

## Cancer Prevention



Tests for increased risk for common hereditary cancers

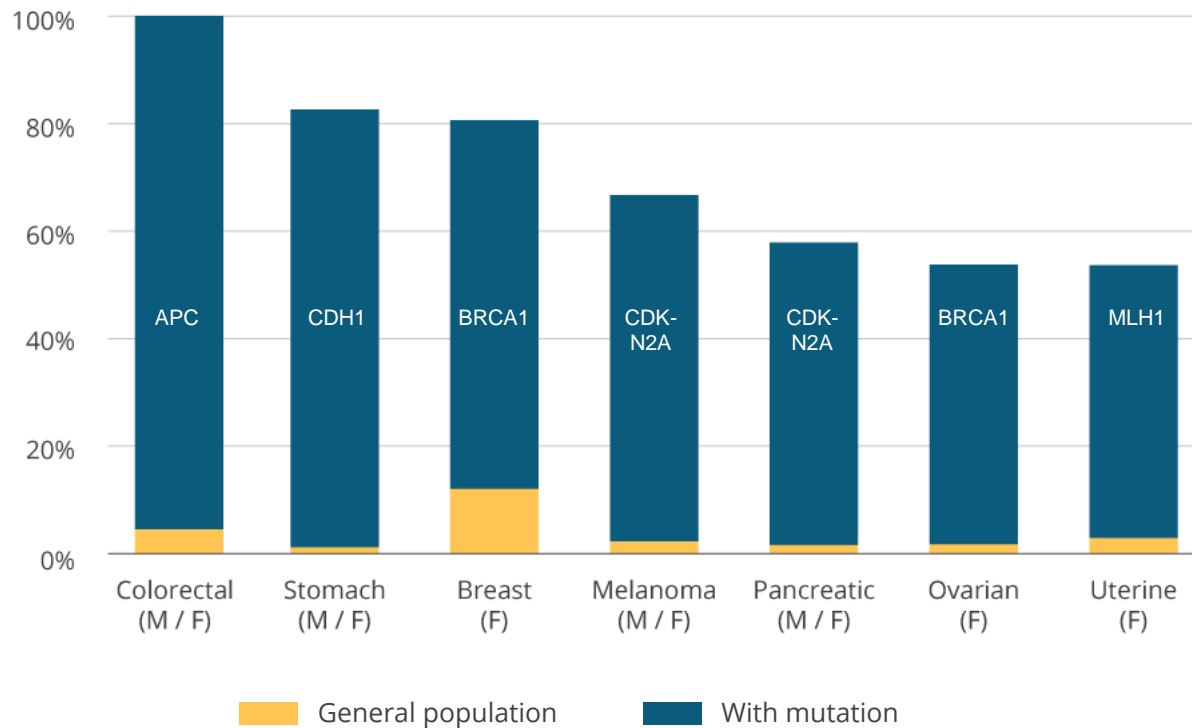
## Heart Health



Tests for hereditary high cholesterol and Sudden Cardiac Arrest



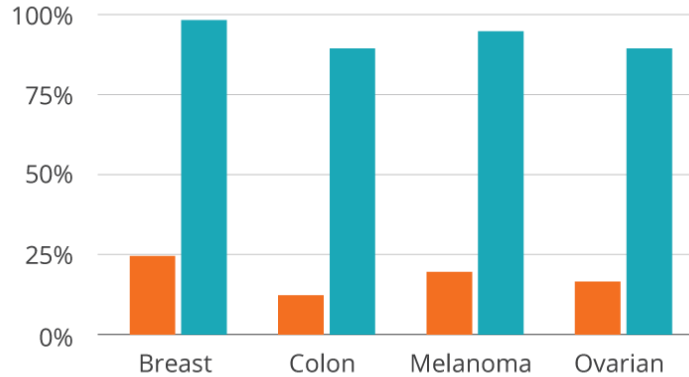
## Average Lifetime Risk of Cancer



Critical to prioritize high-impact genetics, where mutations may significantly increase the risk of cancer

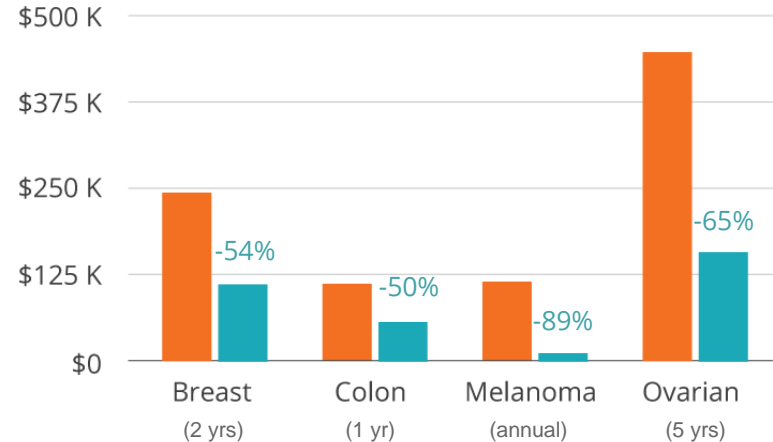
# Earlier detection improves survival rates and reduces treatment costs

Average 5-yr survival rate by stage



Early stage cancers have much higher survival rates...

Estimated treatment cost by stage

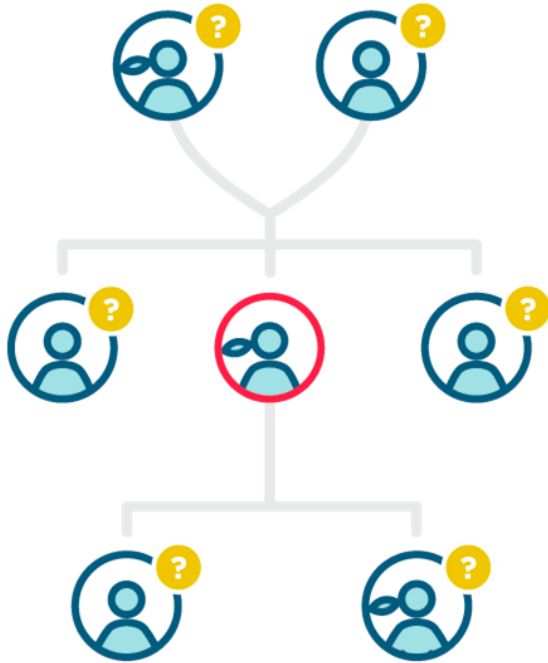


...and lower average treatment costs than advanced stage cases

Early stage Advanced stage



Families benefit from this information as well



First-degree relatives of those with mutations have a 50% chance of having the same mutation

### Family Testing Program

Color and the BRCA Foundation have partnered to offer Color's full-panel genetic testing to parents, siblings, and adult children of people with mutations for a discounted rate of \$50

However, >90% of people with genetic mutations are still not aware of their elevated risk



# Why don't people know their genetics?



## Awareness

Lack of knowledge from medical professionals, late diagnosis, lack of support



## Accessibility

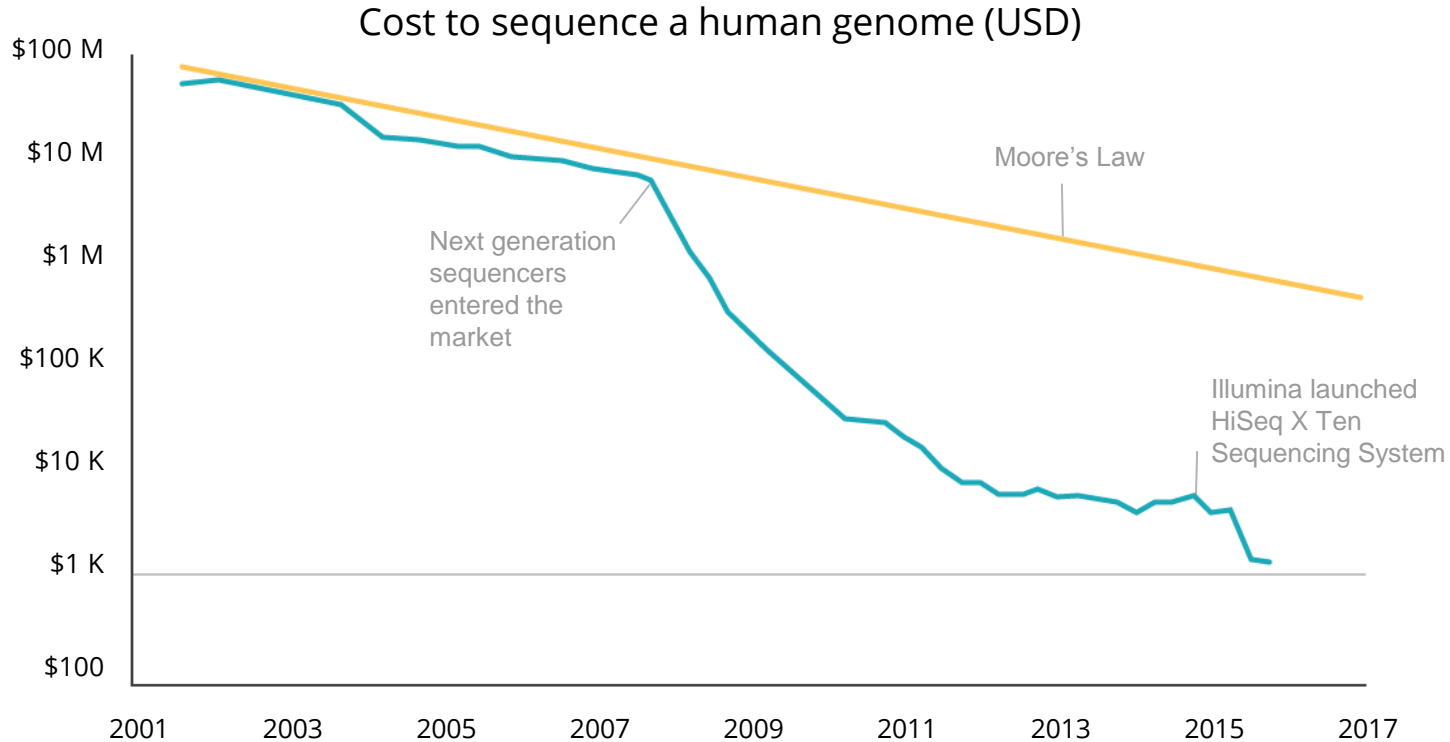
Restricted access to genetic testing



## Affordability

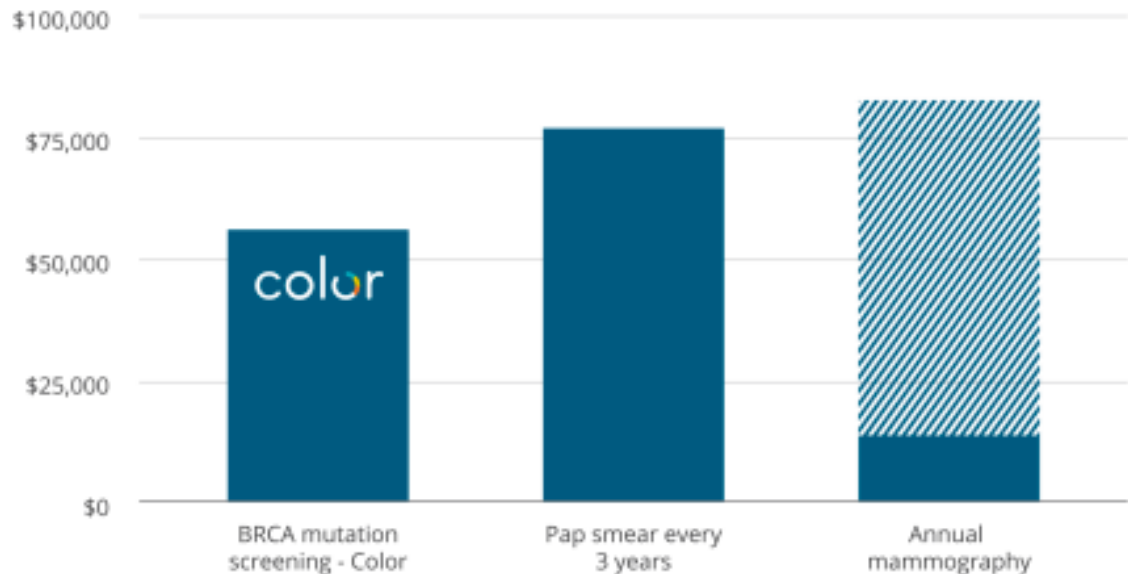
Genetic tests costs thousands of dollars

# Scientific breakthroughs in gene sequencing are enabling access to vast amounts of genetic information



## JAMA Oncology's study identified Color's price-point to be cost-effective for population-level screening

Cost-effectiveness ratio (\$/QALY) of testing strategies in the US

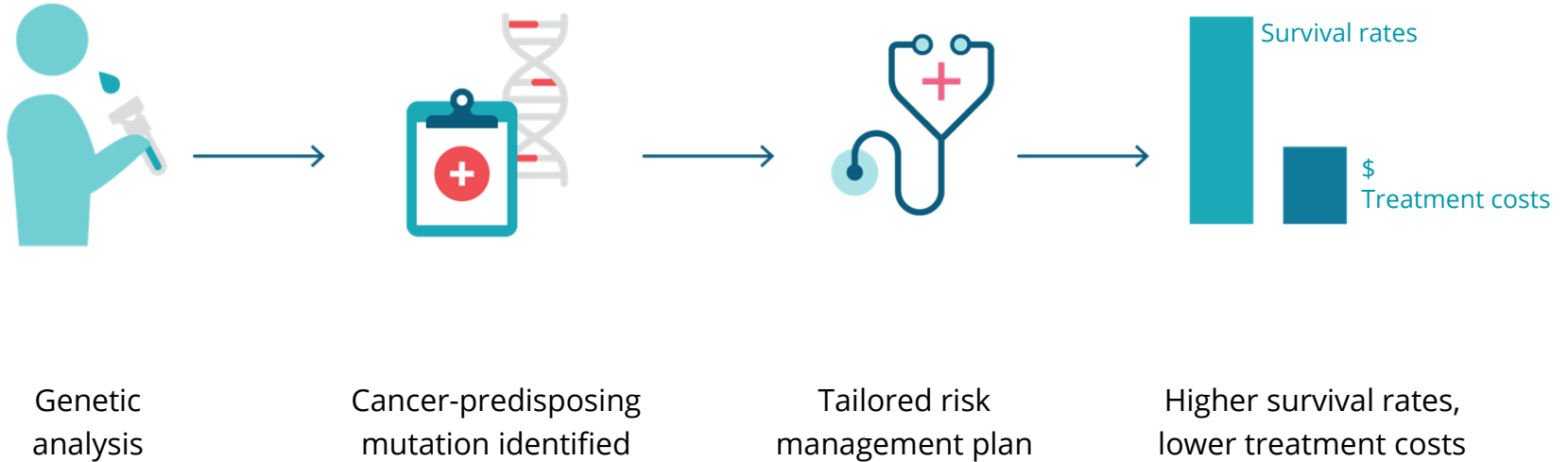


***"If the price of BRCA genetic testing falls below \$250 as indicated by Color Genomics, cost-effectiveness dramatically improves to \$53,000 per QALY gained, far below the oft-cited \$100,000 acceptable cost-effectiveness threshold."***

Long, EF and Ganz, PA, JAMA Oncology, Sept 2015

What if your higher-risk employees could understand their risk earlier and manage it better?

# Early genetic analysis is key to tailoring a risk management plan



# A new comprehensive model for employers

Services	Traditional	Precision Health Platform
<b>For employees</b>		
Genetic test(s)	✓	✓
Risk assessment and screening guidelines	✓	✓
Check-ins with board-certified genetic counselors		✓
Shared Family Health History		✓
Family Testing Program		✓
Future content and disease areas		✓
<b>For employers</b>		
Educational materials		✓
Custom support		✓
Integration with other vendors		✓
Dedicated account manager		✓
Aggregate reporting		✓



# Knowledge of cancer risk is key to early detection and prevention



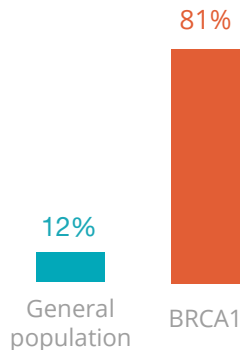
## Color Employee Story

Genetic testing reveals BRCA1+



Parul  
29 year old, young mother, active professional

Known higher risk of breast cancer



Average breast cancer risk

Personalized risk management plan



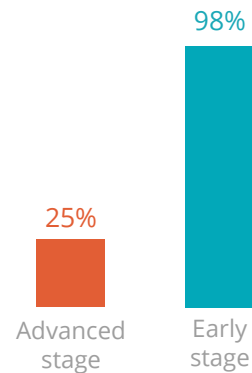
Early detection



Felt lump and insisted on biopsy

Early stage breast cancer

Meaningful benefits

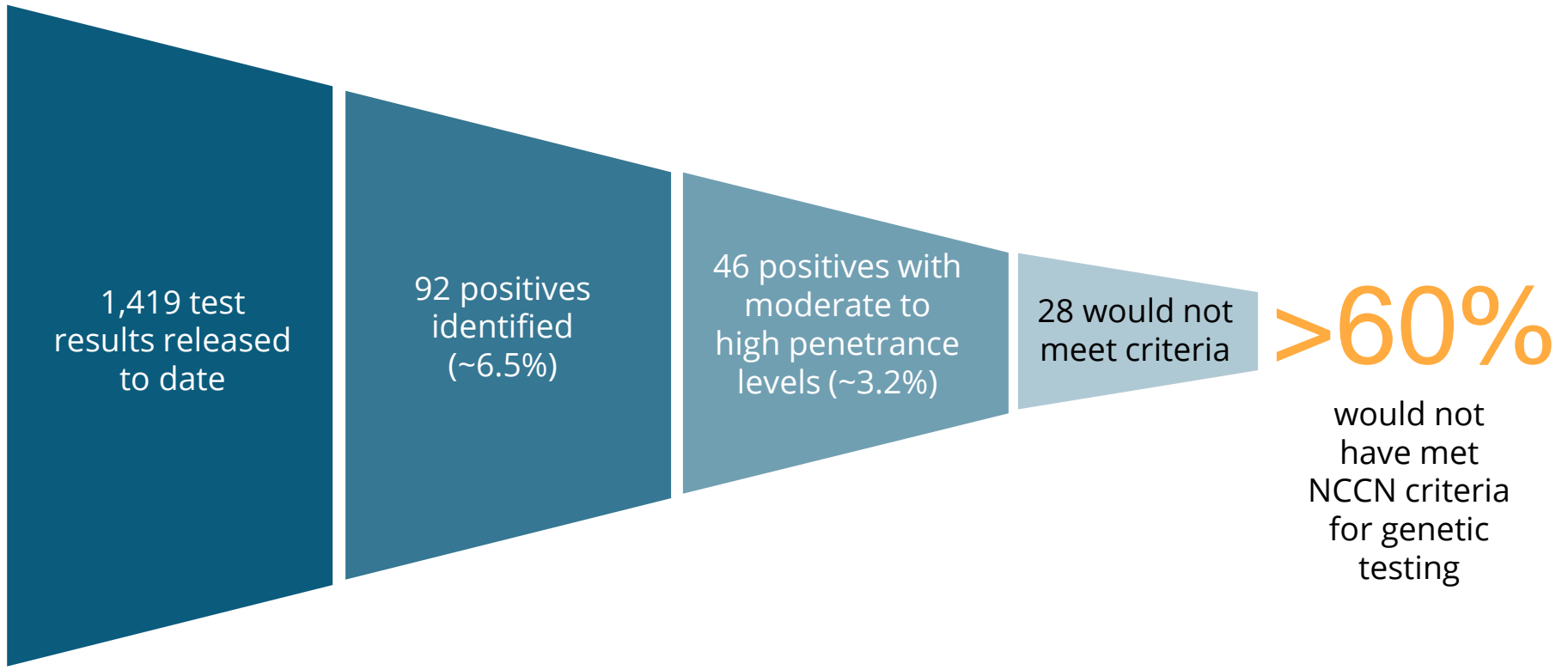


Breast cancer survival rate after 5 years

50% lower treatment costs

## Parul's Story

Of the 46 employees identified with moderate to high penetrant mutations, at least 28 do not meet NCCN criteria



The 16 people with the highest-penetrance mutations would not have known their risk until after they were diagnosed with cancer



**Potentially a multi-million dollar exposure  
in treatment costs alone**

## CASE STUDY: BENDING THE CANCER CURVE

- Technology company with over **5K employees US employees, 1,000 tested in first 2 months**
- **Cancer is largest health care expense**

73

Participants identified  
as high risk

\$350K

Color Program  
cost

\$480K

Company's average  
cancer cost per  
incidence

- Avoiding just one cancer out of 73 high risk people pays for the cost of the program
- 77% (53 people) of high risk users would not have met insurance criteria for testing

# Regardless of their reason for considering genetic testing, Individuals are deeply impacted and grateful for their experience

Helping family be proactive

“

“I’m just **so thankful** we can be proactive and do what we need to do to protect ourselves.”

- Lauren, no family history, tested BRCA2+, then detected early stage breast cancer

Looking for answers

“

“We were **just elated**...I talked to my daughter very firmly...You don’t have to go through the extreme process if you’re ahead of things.”

- Bev, personal and family history of cancer, tested negative

Personal curiosity

“

“We don’t ever want to have to uproot our lives to cancer. If **we could have the information at our fingertips**, wouldn’t we want it that way?”

- Brian, family history of pancreatic cancer, tested BRCA2+

## MEMBER EXPERIENCE



AMANDA McCULLOUGH  
VP of Global Benefits

### EMPLOYER TESTIMONIAL

“Visa offers the Color Test because it’s a perfect fit with our **preventive health** strategy. Our **employees love it**, and we’ve seen exceptionally strong utilization.

“**From a cost perspective, it was a no-brainer for us**, as avoiding even one late-stage cancer case would cover the entire cost of the program.”

### EMPLOYEE TESTIMONIAL

“When I first heard about Visa extending an offer of Color Genomics to their employees, I felt very proud. It sincerely has the potential of saving lives.”



color

# Why organizations are integrating genetic testing into their benefits platform

