



# About Me

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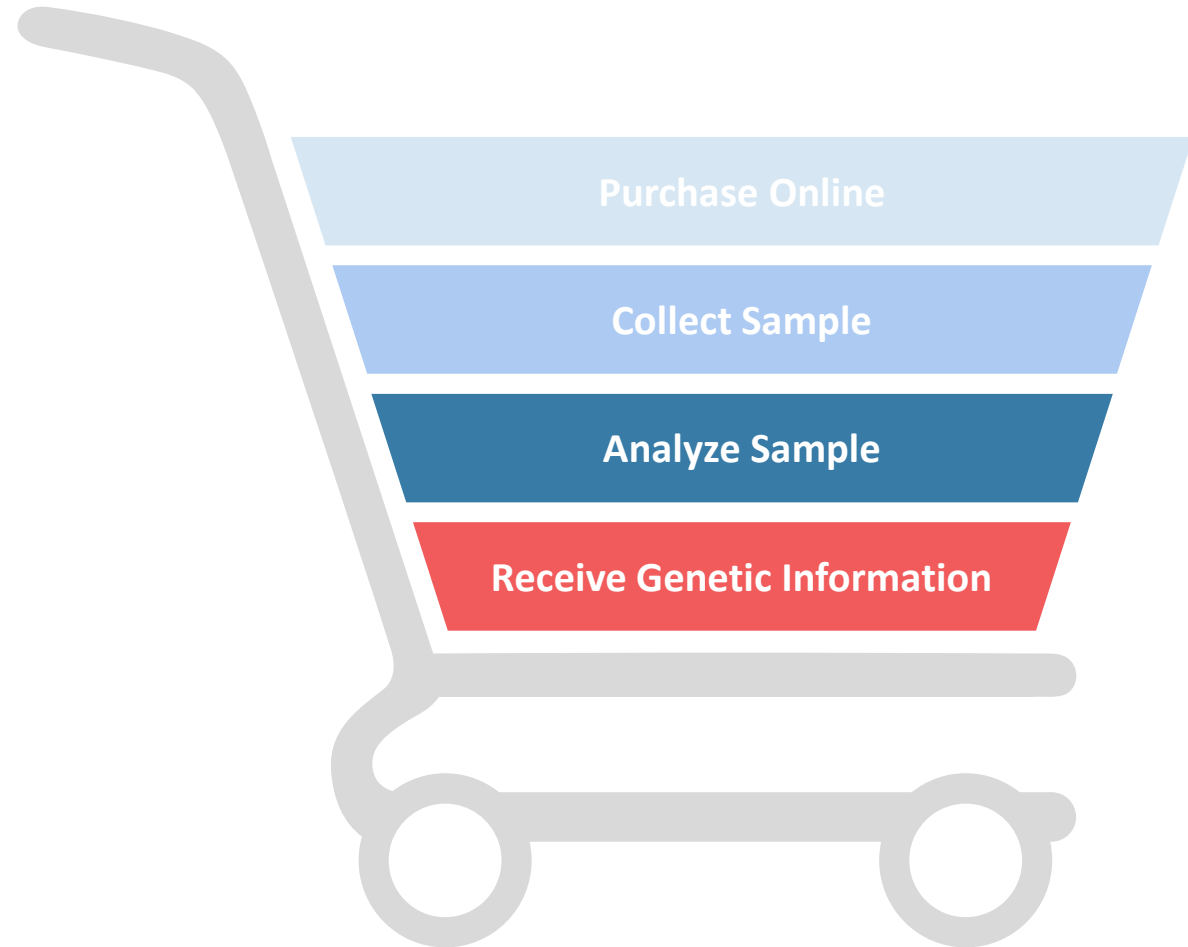
- Home University: University of Denver
- Major: Molecular Biology
- Minor: Chemistry & Leadership
- Host University: KU Leuven
- Future Plans: Medical School → Pediatric Oncology

**KU LEUVEN**

# Centre for Biomedical Ethics and Law

Direct-to-Consumer Genetic  
Tests and their Effect on Public  
Health

# The Process



# Ethical Concerns



## Clinical Validity

the predictive value of a test for a given clinical outcome



## Clinical Utility

the ability of a test to prevent or ameliorate adverse health outcomes



## Consumer Health Literacy

the ability to obtain, read, understand, and use healthcare information in order to make appropriate health decisions

## Behavioral Changes

Sample Size	Change in Diet	Change in Exercise	Change in Vitamin/Supplement Regimen	Other
n=1048	33%	14%	16%	
n=762	31%	26%	21%	
n=45	53.3%	26.7%	13.3%	
n=1048	10%	14%		3% (OTC Medications)
n=60				33.3% unspecified behavioral change

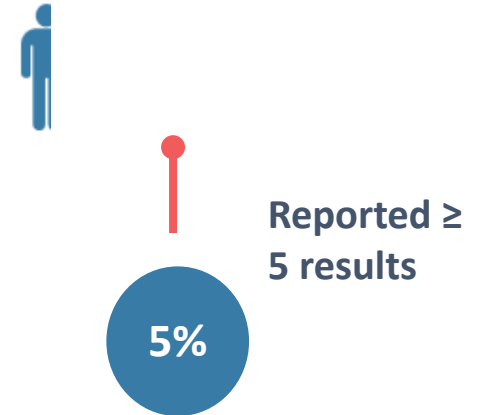
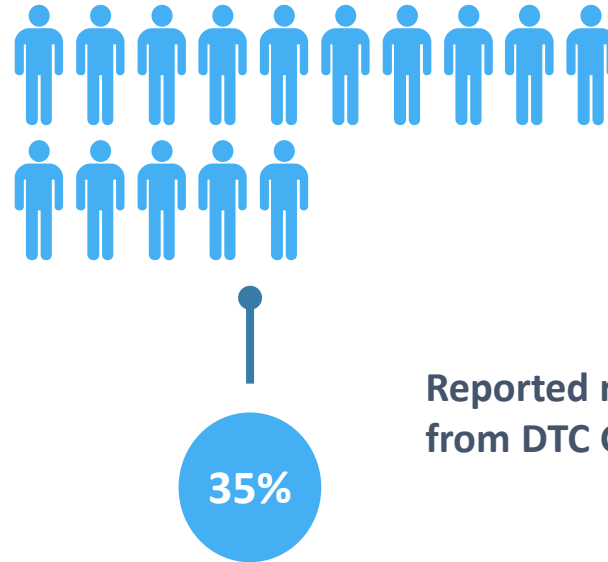
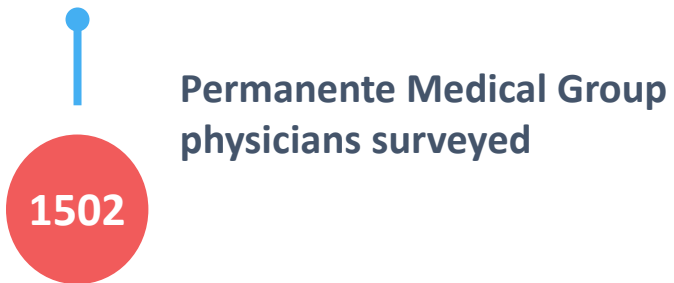
## Clinical Changes

	Sample Size	High Risk Individuals	Statistically Significant Change
<b>Screening</b>	n=144	52.7% (cervical) 54.8% (breast)	X
	n=1042	24% (colorectal/prostate) 12% (breast)	X

	Sample Size	% Change	Unsupervised Change
<b>Prescription Regimen</b>	n=961	5.6%	< 1%
	n=1048	4.4%	n/a

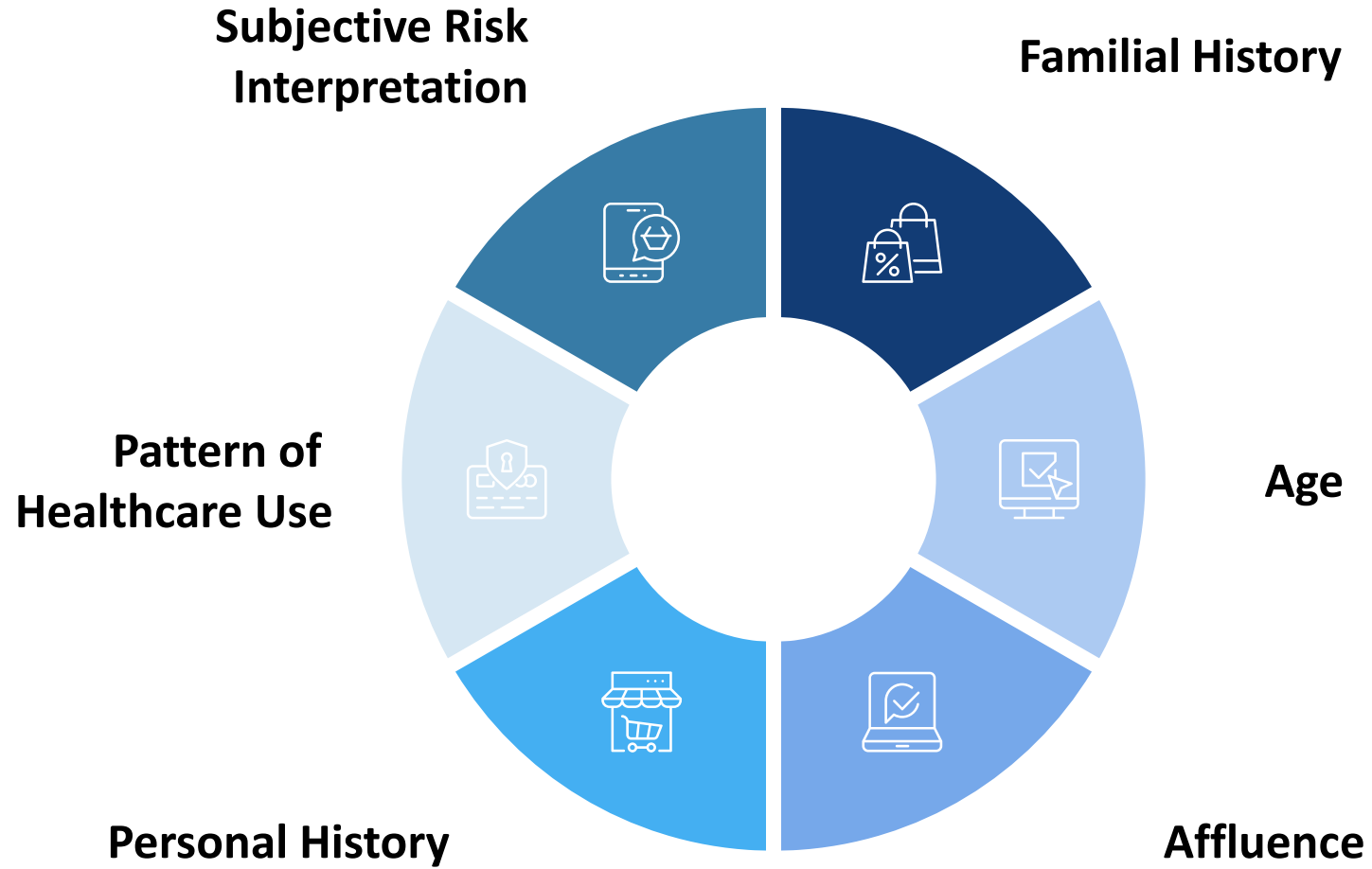
## Clinical Changes

	Sample Size	GC	PCP	Other
HCP Uptake	n=1042	4%	29%	17%
	n=2204	0%	26.5%	
	n=1026		27%	8%
	n=122			10.7%
	n=60			41.6%





# Why?



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**Thank You!**



## Works Cited

<https://pubmed.ncbi.nlm.nih.gov/22278220/>  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5455805/#B15>  
<https://onlinelibrary.wiley.com/doi/10.1007/s10897-012-9483-0>  
<https://onlinelibrary.wiley.com/doi/10.1007/s10897-013-9582-6>  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3348376/>  
<https://pubmed.ncbi.nlm.nih.gov/27657683/>  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3348376/>  
<https://www.karger.com/Article/FullText/444477>  
<https://pubmed.ncbi.nlm.nih.gov/26928821/>  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3679226/>