Supplementary Online Content

Miller EG, Young JL, Rao A, Ward-Lev E, Halley MC. Demographic characteristics associated with perceptions of personal utility in genetic and genomic testing: a systematic review. *JAMA Netw Open*. 2023;6(5):e2310367. doi:10.1001/jamanetworkopen.2023.10367

eTable 1. Search Strings eTable 2. Synthesis of Demographic Categories eTable 3. Complete Codebook

This supplementary material has been provided by the authors to give readers additional information about their work.

PubMed

Search String 1: ("genetic testing"[majr] OR "genetic testing"[tiab] OR "genetics testing"[tiab] OR "genome testing"[tiab] OR "genomic testing"[tiab] OR "genomics testing"[tiab] OR "genetic sequencing"[tiab] OR "genetics sequencing"[tiab] OR "genome sequencing"[tiab] OR "genomic sequencing"[tiab] OR "genomics sequencing"[tiab] OR "exome sequencing"[tiab] OR "exomic sequencing"[tiab] OR "sequence analysis, dna"[majr] OR "genetic profiling"[tiab] OR "genome profiling"[tiab] OR "genomic profiling"[tiab] OR "genomics profiling"[tiab] OR "direct to consumer testing"[tiab] OR "direct to consumer genetic"[tiab] OR "direct to consumer genetics"[tiab] OR "direct to consumer genome"[tiab] OR "direct to consumer genomic"[tiab] OR "direct to consumer genomics"[tiab] OR "personal genetic"[tiab] OR "personal genetics"[tiab] OR "personal genome"[tiab] OR "personal genomic"[tiab] OR "personal genomics"[tiab] OR "individual genetic"[tiab] OR "individual genetics"[tiab] OR "individual genome"[tiab] OR "individual genomic"[tiab] OR "individual genomics"[tiab] OR "genetic susceptibility testing"[tiab] OR "genomic risk profiling"[tiab] OR "genome based testing"[tiab]) AND ("personal utility"[tiab] OR "patient utility"[tiab] OR "individual utility"[tiab] OR "participant utility"[tiab] OR "consumer utility"[tiab] OR "public utility"[tiab] OR "health utility"[tiab] OR "health-related utility"[tiab] OR "perceived utility"[tiab] OR "patient-oriented utility"[tiab] OR "personal meaning"[tiab] OR "patient meaning"[tiab] OR "individual meaning"[tiab] OR "participant meaning"[tiab] OR "consumer meaning"[tiab] OR "public meaning"[tiab] OR "personal value"[tiab] OR "patient value"[tiab] OR "individual value"[tiab] OR "participant value"[tiab] OR "consumer value"[tiab] OR "public value"[tiab] OR "personal benefit"[tiab] OR "personal benefits"[tiab] OR "personal harm"[tiab] OR "personal harms"[tiab] OR "personal outcome"[tiab] OR "personal outcomes"[tiab] OR "non-clinical benefit"[tiab] OR "non-clinical benefits"[tiab] OR "nonclinical benefit"[tiab] OR "non-clinical benefits"[tiab] OR "non-clinical ben medical benefit"[tiab] OR "non-medical benefits"[tiab] OR "nonmedical benefit"[tiab] OR "nonmedical benefits"[tiab] OR "psychological outcome"[tiab] OR "psychological impact" [tiab] OR "psychological outcomes" [tiab] OR "psychological impacts" [tiab])

Search String 2: ("genetic testing"[majr] OR "genetic testing"[tiab] OR "genetics testing"[tiab] OR "genome testing"[tiab] OR "genomic testing"[tiab] OR "genomic testing"[tiab] OR "genomic testing"[tiab] OR "genomic sequencing"[tiab] OR "genomic profiling"[tiab] OR "genomic sequencing"[tiab] OR "direct to consumer testing"[tiab] OR "direct to consumer genetics"[tiab] OR "direct to consumer genomics"[tiab] OR "direct to consumer genomics"[tiab] OR "direct to consumer genomics"[tiab] OR "personal genetics"[tiab] OR "personal genomics"[tiab] OR "personal genomics"[tiab] OR "individual genomics"[tiab] OR "genomic succeptibility testing"[tiab] OR "genomic risk profiling"[tiab] OR "genome based testing"[tiab]) AND ((personal[ti] OR patient[ti])))

Scopus

Search String 1: TITLE ("genetic testing" OR "genetics testing" OR "genome testing" OR "genomic testing" OR "genomics testing" OR "genetic sequencing" OR "genetics sequencing" OR "genetics sequencing" OR "genome sequencing" OR "genomic sequencing" OR "genomics sequencing" OR "genomics sequencing" OR "genomics sequencing" OR "genomics profiling" OR "genetic profiling" OR "genome profiling" OR "genomic profiling" OR "genomics profiling" OR "direct to consumer testing" OR "direct to consumer genetic" OR "direct to consumer genetics" OR "direct to consumer genome." OR "direct to consumer genomics" OR "personal genetics" OR "personal genetics" OR "personal genomic" OR "personal genomics" OR "individual genetics" OR "individual genome" OR "individual genomics" OR "individual genetics" OR "individual genome" OR "individual genomics" OR "genome based testing") AND TITLE-ABS-KEY ("personal utility" OR "patient utility" OR "individual utility" OR "patient meaning" OR "patient meaning" OR "patient meaning" OR "public utility" OR "patient meaning" OR "patient meaning" OR "public meaning" OR "patient meaning" OR "patient meaning" OR "public meaning" OR "public meaning" OR "patient meaning" OR "public meaning" OR "patient meaning" OR "public meaning" OR "public meaning" OR "patient meaning" OR "public meaning" OR "patient meaning" OR "public meaning" OR "public meaning" OR "public meaning" OR "public meaning" OR "patient meaning" OR "public meaning" OR "public meaning" OR "public meaning" OR "patient meaning" OR "public meaning" OR "public meaning" OR "public meaning" OR "public meaning" OR "patient meaning" OR "public meaning" OR "public meaning" OR "public meaning" OR "public meaning" OR "pub

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OR "clinical meaning" OR "medical meaning" OR "personal value" OR "patient value" OR "individual value" OR "participant value" OR "consumer value" OR "public value" OR "psychological outcome" OR "psychological impact" OR "psychological outcomes" OR "psychological impacts" OR "personal benefit" OR "personal benefits" OR "personal harm" OR "personal harms" OR "personal outcome" OR "personal outcomes" OR "non-clinical benefit" OR "non-clinical benefits" OR "non-medical benefits" O

Search String 2: (TITLE ("genetic testing" OR "genetics testing" OR "genome testing" OR "genomic testing" OR "genomics testing" OR "genetics sequencing" OR "genetics sequencing" OR "genome sequencing" OR "genomic sequencing" OR "genomics sequencing" OR "genomic sequencing" OR "direct to consumer testing" OR "direct to consumer genetic" OR "direct to consumer genomic" OR "direct to consumer genomics" OR "personal genetics" OR "personal genetics" OR "personal genomic" OR "personal genomics" OR "individual genetics" OR "individual genome" OR "individual genomics" OR "genetic susceptibility testing" OR "genomic risk profiling" OR "genome based testing") AND (TITLE (personal OR patient OR individual OR participant OR consumer) AND TITLE (utility OR meaning OR value OR benefit))

Web of Science

Search String 1: TITLE: ("genetic testing" OR "genetics testing" OR "genome testing" OR "genomic testing" OR "genomics sequencing" OR "genetic sequencing" OR "genetics sequencing" OR "sequence analysis" OR "genetic profiling" OR "genome profiling" OR "genomic profiling" OR "genomics profiling" OR "direct to consumer genetics" OR "direct to consumer genetics" OR "direct to consumer genomics" OR "direct to consumer genetics" OR "personal genetics" OR "personal genetics" OR "personal genomic" OR "personal genomics" OR "genetic susceptibility testing" OR "genomic risk profiling" OR "genome based testing") *AND* TOPIC: ("personal utility" OR "patient utility" OR "patient-oriented utility" OR "personal meaning" OR "personal meaning" OR "personal value" OR "personal meaning" OR "personal meaning" OR "personal value" OR "personal benefit" OR "personal benefit" OR "non-clinical benefit" OR "non-medical benefit" OR "non-clinical benefit" OR "non-medical benefit" OR "non-medical benefits" OR "non-clinical benefit" O

Refined by:LANGUAGES: (ENGLISH)

Search String 2: TITLE: ("genetic testing" OR "genetics testing" OR "genome testing" OR "genomic testing" OR "genomics testing" OR "genetic sequencing" OR "genetics sequencing" OR "genome sequencing" OR "genomic sequencing" OR "genomics sequencing" OR "exome sequencing" OR "exomic sequencing" OR "sequence analysis" OR "genetic profiling" OR "genome profiling" OR "genomic profiling" OR "genomics profiling" OR "direct to consumer testing" OR "direct to consumer genetic" OR "direct to consumer genetics" OR "direct to consumer genome" OR "direct to consumer genomics" OR "direct to consumer genetics" OR "personal genetics" OR "personal genomics" OR "personal genomics" OR "direct to consumer genomics" OR "personal genetics" OR "individual genome" OR "personal genomics" OR "genetic susceptibility testing" OR "genomic risk profiling" OR "genome based testing") *AND* TITLE: (((personal OR patient OR individual OR participant OR consumer) AND (utility OR meaning OR value OR benefit))) Refined by:LANGUAGES: (ENGLISH)

Embase

Search String 1: ('genetic screening'/exp/mj OR 'genetic testing':ti OR 'genetics testing':ti OR 'genome testing':ti OR 'genomic testing':ti OR 'genomics testing':ti OR 'genetic sequencing':ti OR 'genetics sequencing':ti OR 'genome sequencing':ti OR 'genomic sequencing':ti OR 'genomics sequencing':ti OR 'exome sequencing':ti OR 'exomic sequencing':ti OR 'sequence analysis'/exp/mj OR 'sequence analysis':ti OR 'genetic profiling':ti OR 'genome profiling':ti OR 'genomic profiling':ti OR 'genomics profiling':ti OR 'direct to consumer testing':ti OR 'direct to consumer genetic':ti OR 'direct to consumer genetic':t OR 'direct to consumer genome':ti OR 'direct to consumer genomic':ti OR 'direct to consumer genomics':ti OR 'personal genetic':ti OR 'personal genetics':ti OR 'personal genome':ti OR 'personal genomic':ti OR 'personal genomics':ti OR 'individual genetic':ti OR 'individual genetic genome':ti OR 'individual genomic':ti OR 'individual genomics':ti OR 'genetic susceptibility testing':ti OR 'genomic risk profiling':ti OR 'genome based testing':ti) AND ('personal utility':ab,ti OR 'patient utility':ab,ti OR 'individual utility':ab,ti OR 'participant utility':ab,ti OR 'consumer utility':ab,ti OR 'public utility':ab,ti OR 'health utility':ab,ti OR 'health-related utility':ab,ti OR 'perceived utility':t,ab OR 'patient-oriented utility':ti,ab OR 'personal meaning':ab,ti OR 'patient meaning':ab,ti OR 'individual meaning':ab,ti OR 'participant meaning':ab,ti OR 'consumer meaning':ab,ti OR 'public meaning':ab,ti OR 'clinical meaning':ab,ti OR 'medical meaning':ab,ti OR 'personal value':ab,ti OR 'patient value':ab,ti OR 'individual value':ab,ti OR 'participant value':ab,ti OR 'consumer value':ab,ti OR 'public value':ab,ti OR 'psychological outcome':ab,ti OR 'psychological impact':ab,ti OR 'psychological outcomes':ab,ti OR 'psychological impacts':ab,ti OR 'personal benefit':ab,ti OR 'personal benefits':ab,ti OR 'personal harm':ab,ti OR 'personal harms':ab,ti OR 'personal outcome':ab,ti OR 'personal outcomes':ab,ti OR 'non-clinical benefit':ab,ti OR 'non-clinical benefit':ab,ti OR 'nonclinical benefits':ab,ti OR 'non-medical benefit':ab,ti OR 'non-medical benefits':ab,ti OR 'nonmedical benefit':ab,ti OR 'nonmedical benefits':ab,ti OR 'nonmedical benefits':ab ([english]/lim AND ([embase]/lim OR [embase classic]/lim)))

Search String 2: (('genetic screening'/exp/mj OR 'genetic testing':ti OR 'genetics testing':ti OR 'genome testing':ti OR 'genomic testing':ti OR 'genomics testing':ti OR 'genetic sequencing':ti OR 'genetics sequencing':ti OR 'genetic sequencing':ti OR 'genomic sequencing':ti OR 'genomic sequencing':ti OR 'genome profiling':ti OR 'direct to consumer genetic':ti OR 'direct to consumer genetics':ti OR 'direct to consumer genetics':ti OR 'genome testing':ti OR 'genome genome':ti OR 'genome testing':ti OR 'gen

A. Sex or Gender		
Coded Categories	Original Terms in Manuscripts*	
Men or Male	Male	
	• Man	
	• Boy	
Other Categories	Nonbinary	
	Transgender Male	
	Transgender Female	
	Other sex or gender	
Women or Female	Female	
	Woman	
	• Girl	

*These terms are quoted directly from the original manuscripts and therefore do not necessarily comply with current reporting standards.

B. Race and Ethnicity		
Coded Categories	Original Terms in Manuscripts*	
Asian American or Pacific Islander (AAPI)	Asian	
	Asian and not Hispanic or Latino	
	South Asian	
	East Asian	
	Asian American	
	Native Hawaiian	
	Pacific Islander	
	Asian/Pacific Islander	
Black	Black	
	African American	
	African American and not Hispanic or Latino	
	Non-Hispanic Black	
	Sub-Saharan African	
Hispanic/Latino	Hispanic	
	Latinx	
	White/Hispanic	

B. Race and Ethnicity	
	Latino
	Hispanic White
	Hispanic or Latino
Multiracial	Mixed ethnicity
	Mixed
	Multiethnic/multiracial
	Hispanic Black
	Hispanic Asian
Native American or Indigenous	American Indian
	Native American
	Alaskan Native
Other	Other race or ethnicity
	Non-Hispanic or Latino, Other Race
	West Indian
	East Indian
	Caribbean/South American
	Ashkenazi Jewish
White	White
	Caucasian
	White/Non-Hispanic
	Non-Latino White
	White and not Hispanic or Latino
	Western European
	Other Mixed Caucasian
	Southern European
	Northern European

*These terms are quoted directly from the original manuscripts and therefore do not necessarily comply with current reporting standards.

C. Education		
Coded Categories	Original Terms in Manuscripts*	
Less than College Degree: High School or Less	 Some primary or elementary school, or completion Some high school or secondary school, or high/secondary school degree, or GED 	
Less than College Degree: Some College	 Some community college or community college degree Vocational training 	

C. Education		
	Two-year college or associate's degree	
	Some technical school or technical school degree	
	Some college, some university	
Less than College Degree: Unspecified	Less than a college degree	
	Greater than high school degree	
College Degree or Higher: Unspecified	Bachelor's degree or higher	
	College, advanced or professional degree	
College Degree or Higher: Bachelor's Degree	College or university degree	
	Bachelor's degree	
College Degree or Higher: Graduate Degree	Master's degree	
	PhD, MD, other advance coursework or postgraduate degree	

*These terms are quoted directly from the original manuscripts and therefore do not necessarily comply with current reporting standards.

eTable 3. Complete Codebook

Variable Name	Variable Type	Definition	Codes If applicable
UPI	Text	Assigned unique identifier	
DOI	Text	Digital Object Identifier	
Title	Text	Study Title	
Journal	Text	Journal Name or Abbreviation	
Year	Text	Year of Publication	
N_Study	Numeric	Total number of all types of participants in the study.	
N_Patient	Numeric	Total number of individuals identified as patients in the study.	
N_Family	Numeric	Total number of individuals identified as family members of patients or caregivers in the study. Include here "advocates" or other individuals whose opinions are collected as a proxy for patients. Do not include individuals recruited as members of the general public who happen to be parents.	
N_Public	Numeric	Total number of individuals identified as members of the general public.	
N_Ineligible	Numeric	Total number of individuals in the study who are not eligible (e.g., physicians, policymakers)	
N_Eligible	Numeric	Total number of patients, family members, or public included in the study.	
Method_Type	Categorical	Indicates whether the paper primarily reporting on a quantitative or a qualitative method. Qualitative papers tended to be exploratory, small samples and involve interviews, focus groups, or case studies. Quantitative papers tended to use surveys and have larger sample sizes. If both methods were used, primary method determined by consensus review by the study team. For example, a study that included a sample in which all participants were interviewed and also complete a survey was characterized as qualitative. If all participants complete a survey and only a small subset are interviewed, then it is characterized as a quantitative. Other was used to categorize infrequently used methodologies (e.g., Delphi methods).	1 = Quantitative 2 = Qualitative 3 = Other
Edu_Rep	Binary	Indicates whether the paper presents data on educational attainment for eligible participants.	1=Yes 0=No
N_HS_OrLess	Numeric	Number of participants categorized as having completed a high school degree or less.	
N_Some_College	Numeric	Number of participants categorized as having completing education beyond high school but not completed a four-year college degree.	

Variable Name	Variable Type	Definition	Codes If applicable
N_LessThan_CollegeDeg_Unspec	Numeric	Number of participants categorized as having not completed a four-year college degree. See Supplementary Appendix 2 for details. Only use if data not disaggregated by N_HS_OrLess and N_Some_College.	
N_CollegeDeg_OrMore_Unspec	Numeric	Number of participants categorized as having completed a four-year college degree or more education. See Supplementary Appendix 2 for details. Only use if data not disaggregated by level of degree	
N_Bachelor_Deg	Numeric	Number of participants categorized as having completed a four-year college degree.	
N_Graduate_Deg	Numeric	Number of participants categorized as having completed a graduate degree.	
N_Edu_Miss	Numeric	Number of participants for whom education data is missing, even though study does report education in general. Includes missing, not reported, or declined. Also includes undefined "other" category if used.	
N_Edu_Rep_Total	Numeric	Total number of individuals with reported education data (does not include those with missing data).	
N_Inc_Rep	Binary	Indicates whether the paper reports data on income for eligible participants.	1=Yes 0=No
N_Inc_Miss	Numeric	Number of participants for whom income data is missing, even though study does report income in general. Includes missing, not reported, or declined.	
N_Inc_BelowMedian	Numeric	Number of participants with income below the U.S. median. Calculated using US population income distribution.	
N_Inc_AboveMedian	Numeric	Number of participants with income below the U.S. median. Calculated using US population income distribution.	
N_Inc_Rep	Numeric	Total number of participants for with income data reported (does not include those with missing data).	
Gen_Rep	Binary	Indicates whether the paper reports data on sex or gender for eligible participants.	1=Yes 0=No
Gender_Focus	Binary	Indicates whether the paper focuses on (and only recruit) females or women. Includes studies on breast cancer and prenatal testing.	1=Yes 0=No
N_Women	Numeric	Number of participants categorized as women or female.	
N_Men	Numeric	Number of participants categorized as men or male.	
N_Gen_Other	Numeric	Number of participants self-reporting a gender other than man or woman.	
N_Gen_Miss	Numeric	Number of participants for whom data on sex and gender is missing. Includes missing, not reported, or declined.	

Variable Name	Variable Type	Definition	Codes If applicable
N_Gen_Rep_Total	Numeric	Total number of individuals with reported data on sex or gender (does not include those with missing data).	
Race_Rep	Binary	Indicates whether the paper reports race and/or ethnicity data. Do not treat country of origin as race or ethnicity if this is the only information provided.	1=Yes 0=No
Diversity_Focus	Binary	Indicates whether the study explicitly states a focus (and only recruit) individuals from diverse racial or eth.	1=Yes 0=No
N_NHWhite	Numeric	Number of participants categorized as non-Hispanic White.	
N_Black	Numeric	Number of participants categorized as Black.	
N_HispLatx	Numeric	Number of participants categorized as Hispanic or Latinx.	
N_AAPI	Numeric	Number of participants categorized as Asian-American or Pacific Islander.	
N_Native_Indig	Numeric	Number of participants categorized as Native American or another indigenous group.	
N_Multiracial	Numeric	Number of participants categorized as multiracial.	
N_Race_Other	Numeric	Number of participants categorized as another race or ethnicity.	
N_Race_Miss	Numeric	Number of participants for whom race and ethnicity data is reported as missing, even though study does report this information in general. Includes missing, not reported, or declined.	
N_Race_Rep_Total	Numeric	Total number of individuals with reported race and/or ethnicity data (does not include those with missing data).	
Race_Discrete	Binary	Indicates a study in which individuals were allowed to select multiple options for race and/or ethnicity.	1=Yes 0=No