

# On Portfolios of Preventive Decisions for Multiple Health Risks – Evidence from US-Based Data

## Portefeuilles de décisions de prévention face aux risques de santé – une analyse sur données américaine

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TABLE 2. Descriptive statistics

Variable	M	SD	Minimum	Maximum	N	Variable	M	SD	Minimum	Maximum	N
<b>Dependent variables</b>						<b>Preferred race category</b>					
Nb. prev. <sup>a</sup> woman <50	2.424	1.941	0	6	4,577	White	0.623	0.485	0	1	22,510
Nb. prev. woman >50	2.561	2.362	0	9	8,044	Hispanic	0.219	0.414	0	1	22,510
Nb. prev. man <50	2.165	1.198	0	4	3,861	Black	0.116	0.320	0	1	22,510
Nb. prev. man >50	2.367	1.939	0	7	6,028	Asian	0.014	0.116	0	1	22,510
Exercising woman <50	0.781	0.414	0	1	4,577	Married	0.524	0.499	0	1	22,510
Exercising woman >50	0.711	0.453	0	1	8,044	Children	0.525	1.004	0	9	22,510
Exercising man <50	0.841	0.366	0	1	3,861	Education	0.697	0.460	0	1	22,510
Exercising man >50	0.767	0.423	0	1	6,028	Employment status					
Screenings woman <50	1.288	1.156	0	3	4,577	Employed	0.450	0.498	0	1	22,510
Screenings woman >50	1.575	1.509	0	6	8,044	Self-employed	0.088	0.284	0	1	22,510
Screenings man <50	0.595	0.491	0	1	3,681	Student	0.023	0.150	0	1	22,510
Screenings man >50	1.140	1.056	0	4	6,028	Retired	0.273	0.446	0	1	22,510

Variable	M	SD	Minimum	Maximum	N	Variable	M	SD	Minimum	Maximum	N
Vaccinations woman <50	0.876	0.781	0	2	4,577	Out of work	0.135	0.342	0	1	22,510
Vaccinations woman >50	0.956	0.787	0	2	8,044	<b>Income level</b>					
Vaccinations man <50	0.875	0.717	0	2	3,861	<\$25 000	0.315	0.464	0	1	22,510
Vaccinations man >50	1.023	0.776	0	2	6,028	from \$25 000 to \$50 000	0.227	0.419	0	1	22,510
<b>Independent variables</b>						> \$50 000	0.458	0.498	0	1	22,510
Caregiver	0.213	0.410	0	1	22,510	Healthcare coverage	0.948	0.222	0	1	22,510
Information access	0.752	0.432	0	1	22,510	Subjective health	3.451	1.072	1	5	22,510
PD	0.820	0.384	0	1	22,510	Health-risk tolerance	0.146	0.353	0	1	22,510
Male	0.439	0.496	0	1	22,510						
<b>Age</b>											
18 to 34	0.161	0.368	0	1	22,510						
35 to 49	0.214	0.410	0	1	22,510						
50 to 64	0.316	0.465	0	1	22,510						
65 to 74	0.190	0.392	0	1	22,510						
75+	0.119	0.324	0	1	22,510						

\*Nb. prev. stands for number of preventive activities

TABLE 3. Regression results for prevention portfolios

	Prevention portfolio (woman)		Prevention portfolio (man)	
	Age < 50 years	Age > 50 years	Age < 50 years	Age > 50 years
<b>Information-related</b>				
Caregiver	0.300*** (0.104)	-0.090 (0.099)	0.235*** (0.089)	0.058 (0.106)
Information access	0.199* (0.106)	0.399*** (0.110)	0.176** (0.069)	0.299** (0.090)
PD	0.547*** (0.109)	0.727*** (0.144)	0.502*** (0.068)	0.779*** (0.105)
<b>Control variables</b>				
Age (baseline: 18–34)				
35 to 49	-0.157 (0.101)		0.004 (0.067)	
65 to 74		-0.294** (0.119)		0.110 (0.112)
75+		-0.667*** (0.136)		-0.294** (0.139)
<b>Preferred race (baseline: none)</b>				
White	-0.101 (0.295)	0.433 (0.312)	0.045 (0.179)	0.097 (0.240)
Hispanic	0.380 (0.356)	1.690*** (0.407)	0.166 (0.211)	0.308 (0.364)
Black	0.066 (0.315)	0.883** (0.343)	0.207 (0.197)	0.001 (0.275)
Asian	-0.161 (0.355)	0.432 (0.528)	-0.418 (0.284)	-1.093*** (0.381)

	Prevention portfolio (woman)		Prevention portfolio (man)	
	Age < 50 years	Age > 50 years	Age < 50 years	Age > 50 years
Married	0.014 (0.109)	-0.005 (0.099)	0.098 (0.070)	0.173* (0.096)
Children	-0.065* (0.035)	-0.104 (0.087)	-0.003 (0.027)	0.001 (0.065)
Education	0.182* (0.101)	-0.010 (0.100)	0.184** (0.073)	0.165* (0.094)
<b>Employment status (baseline: employed)</b>				
Self-employed	-0.168 (0.186)	-0.351** (0.176)	-0.107 (0.088)	-0.204 (0.125)
Student	-0.096 (0.188)	-1.064** (0.470)	0.340** (0.135)	-0.628 (0.950)
Retired	-1.308** (0.657)	0.026 (0.136)	-0.633 (0.488)	-0.044 (0.121)
Out of work	-0.128 (0.121)	-0.274* (0.154)	0.182 (0.122)	-0.010 (0.164)
<b>Income level (baseline: &lt;\$25,000)</b>				
from \$25,000 to \$50,000	-0.107 (0.136)	0.096 (0.135)	0.027 (0.096)	-0.116 (0.128)
>\$50,000	-0.023 (0.149)	0.084 (0.142)	0.216** (0.097)	0.067 (0.135)
Healthcare coverage	0.480*** (0.169)	0.326 (0.228)	0.119 (0.103)	0.336** (0.171)
Subjective health	-0.030 (0.045)	0.098** (0.046)	0.051 (0.032)	0.125*** (0.041)

	Prevention portfolio (woman)		Prevention portfolio (man)	
	Age < 50 years	Age > 50 years	Age < 50 years	Age > 50 years
Health-risk tolerance	-0.090 (0.123)	-0.255* (0.133)	-0.040 (0.079)	-0.089 (0.119)
Constant	1.795*** (0.391)	0.522 (0.455)	0.930** (0.246)	0.562 (0.346)
N	4,373 0.059	7,868 0.046	3,719 0.141	5,877 0.056

Standard errors in parentheses. Significance levels at 10% (\*), 5% (\*\*), 1% (\*\*\*).

TABLE 4. Regression results for prevention portfolios by group types

	Screenings (woman)		Screenings (man)		Vaccinations
	Age < 50 years	Age > 50 years	Age < 50 years	Age > 50 years	
<b>Information-related</b>					
Caregiver	-0.006 (0.028)	-0.020 (0.020)	0.065* (0.034)	0.001 (0.027)	0.064*** (0.021)
Information access	0.035 (0.029)	0.057*** (0.022)	0.044 (0.028)	0.038 (0.025)	0.075*** (0.020)
PD	0.163*** (0.029)	0.167*** (0.034)	0.325*** (0.027)	0.229*** (0.033)	0.185*** (0.023)
<b>Control variables</b>					
Age in years (baseline: 18–34)					
35 to 49	-0.036 (0.026)		0.020 (0.027)		-0.063** (0.028)
50 to 64					0.002 (0.028)
65 to 74		-0.029 (0.023)		0.043 (0.027)	0.081** (0.036)
75+		-0.071** (0.028)		-0.060* (0.034)	0.047 (0.040)
<b>Preferred race (baseline: none)</b>					
White	-0.113* (0.067)	-0.007 (0.075)	-0.148** (0.075)	-0.028 (0.064)	0.101* (0.054)
Hispanic	-0.037 (0.082)	0.255*** (0.085)	-0.079 (0.086)	0.015 (0.092)	0.221*** (0.073)
Black	0.045 (0.072)	0.072 (0.079)	0.053 (0.081)	-0.017 (0.073)	-0.030 (0.060)
Asian	-0.218** (0.103)	0.072 (0.156)	-0.044 (0.105)	-0.089 (0.118)	-0.060 (0.081)

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	Screenings (woman)		Screenings (man)		Vaccinations
	Age < 50 years	Age > 50 years	Age < 50 years	Age > 50 years	
Married	0.031 (0.027)	0.004 (0.020)	0.015 (0.029)	0.046* (0.025)	0.002 (0.020)
Children	-0.013 (0.010)	-0.022 (0.017)	-0.011 (0.027)	0.001 (0.017)	0.002 (0.010)
Education	0.050* (0.029)	-0.033* (0.020)	0.017 (0.027)	0.020 (0.024)	0.098* (0.020)
<b>Employment status (baseline: employed)</b>					
Self-employed	-0.104** (0.047)	-0.051 (0.041)	-0.027 (0.038)	-0.044 (0.034)	-0.066** (0.028)
Student	0.005 (0.047)	-0.058 (0.134)	0.156*** (0.046)	-0.329*** (0.156)	0.112* (0.060)
Retired	-0.148 (0.175)	0.017 (0.025)	0.030 (0.183)	-0.026 (0.030)	0.041 (0.030)
Out of work	-0.028 (0.033)	-0.056* (0.029)	0.234*** (0.046)	0.053 (0.041)	-0.008 (0.028)
<b>Income level (baseline: &lt;\$25,000)</b>					
from \$25,000 to \$50,000	-0.043 (0.035)	-0.003 (0.026)	0.018 (0.038)	-0.023 (0.033)	-0.022 (0.027)
>\$50,000	-0.054 (0.038)	0.002 (0.028)	0.018 (0.037)	-0.001 (0.035)	0.060** (0.029)
Healthcare coverage	0.152*** (0.046)	0.092* (0.056)	0.155*** (0.041)	0.158*** (0.056)	0.142*** (0.034)
Subjective health	-0.020* (0.012)	0.000 (0.009)	-0.011 (0.012)	0.010 (0.010)	-0.016* (0.009)
Health-risk tolerance	-0.016 (0.033)	-0.022 (0.029)	-0.072** (0.030)	-0.024 (0.032)	-0.066*** (0.024)
Male					0.047*** (0.018)
Constant	0.0596*** (0.098)	0.348*** (0.101)	0.0331*** (0.097)	0.235** (0.097)	0.547*** (0.075)
N	4,373	7,868	3,719	5,877	19,738
R <sup>2</sup>	(0.073)	0.036	0.205	0.060	0.161

Standard errors in parentheses. Significance levels at 10% (\*), 5% (\*\*), 1% (\*\*\*)

TABLE 5. Regression results for prevention types for women

	Exercising (odds ratio – logit)		Screenings		Vaccinations	
	Age < 50 years	Age > 50 years	Age < 50 years	Age > 50 years	Age < 50 years	Age > 50 years
<b>Interactions</b>						
Exercising			–0.044 (0.066)	0.049 (0.067)	0.048 (0.043)	0.078** (0.031)
Screenings	0.848 (0.119)	0.948 (0.089)			0.103*** (0.037)	0.128*** (0.028)
Vaccination	1.140 (0.164)	1.254** (0.126)	0.111* (0.061)	0.359*** (0.063)		
<b>Information-related</b>						
Caregiver	1.238 (0.199)	1.272** (0.135)	0.012 (0.066)	–0.048 (0.064)	0.142*** (0.043)	0.005 (0.031)
Information access	1.064 (0.162)	1.012 (0.105)	0.050 (0.068)	0.193** (0.075)	0.087** (0.043)	0.110*** (0.032)
PD	1.375*** (0.220)	1.114 (0.198)	0.357*** (0.067)	0.455*** (0.099)	0.080* (0.043)	0.208*** (0.044)
<b>Control variables</b>						
Age in years (baseline: 18–34)						
35 to 49	0.797 (0.116)		–1.115* (0.062)		–0.024 (0.039)	
65 to 74		0.910 (0.108)		–0.284*** (0.077)		0.000 (0.035)
75+		0.779* (0.108)		–0.573*** (0.091)		–0.008 (0.041)



	Exercising (odds ratio – logit)		Screenings		Vaccinations	
	Age < 50 years	Age > 50 years	Age < 50 years	Age > 50 years	Age < 50 years	Age > 50 years
<b>Preferred race (baseline: none)</b>						
White	1.104 (0.424)	1.443 (0.467)	-0.386 (0.183)	-0.058 (0.227)	0.084 (0.078)	0.127 (0.127)
Hispanic	0.639 (0.287)	1.863 (0.909)	-0.053 (0.224)	0.607** (0.285)	0.289** (0.113)	0.258* (0.149)
Black	0.731 (0.299)	1.396 (0.492)	0.128 (0.199)	0.395 (0.246)	-0.149* (0.088)	0.006 (0.133)
Asian	1.366 (0.709)	4.161* (3.071)	-0.568** (0.249)	-0.076 (0.361)	0.069 (0.108)	-0.160 (0.196)
Married	0.817 (0.123)	0.084 (0.070)	0.084 (0.070)	0.032 (0.065)	-0.056 (0.043)	-0.026 (0.031)
Children	0.898** (0.047)	0.907 (0.077)	-0.030 (0.021)	-0.043 (0.058)	0.009 (0.016)	-0.034 (0.025)
Education	1.51 (0.171)	1.044 (0.101)	0.199*** (0.063)	-0.093 (0.066)	0.070 (0.043)	0.072** (0.031)
<b>Employment status (baseline: employed)</b>						
Self-employed	2.031*** (0.480)	1.693** (0.351)	-0.071 (0.122)	-0.286** (0.115)	-0.133** (0.062)	-0.118** (0.054)
Student	1.475 (0.395)	0.287* (0.212)	-0.266** (0.111)	-0.579* (0.312)	0.059 (0.081)	0.084 (0.221)
Retired	0.990 (1.247)	0.891 (0.127)	-0.175 (0.484)	0.062 (0.087)	-0.263 (0.172)	0.002 (0.040)
Out of work	0.914 (0.149)	0.762* (0.110)	-0.112 (0.075)	-0.211** (0.103)	-0.013 (0.047)	0.003 (0.042)

	Exercising (odds ratio – logit)		Screenings		Vaccinations	
	Age < 50 years	Age > 50 years	Age < 50 years	Age > 50 years	Age < 50 years	Age > 50 years
<b>Income level (baseline: &lt;\$25,000)</b>						
from \$25,000 to \$50,000	1.410* (0.250)	1.114 (0.140)	-0.073 (0.083)	-0.029 (0.091)	-0.040 (0.056)	0.064* (0.039)
> \$50,000	2.713*** (0.580)	1.709*** (0.255)	-0.105 (0.092)	-0.021 (0.093)	0.098 (0.060)	0.077* (0.047)
Healthcare coverage	0.954 (0.213)	0.904 (0.212)	0.320*** (0.105)	0.372** (0.157)	0.122* (0.065)	0.164** (0.066)
Subjective health	1.314*** (0.088)	1.660*** (0.082)	-0.029 (0.029)	0.044 (0.032)	-0.026 (0.018)	-0.036*** (0.013)
Health-risk tolerance	0.607*** (0.107)	0.796 (0.119)	0.007 (0.075)	-0.167* (0.086)	-0.083 (0.052)	-0.127*** (0.040)
Constant	1.109 (0.594)	0.379** (0.173)	1.150*** (0.249)	0.415 (0.320)	0.551*** (0.136)	0.337** (0.149)
N	4,373	7,868	4,373	7,868	4,373	7,868
R <sup>2</sup>	0.131	0.137	0.082	0.077	0.169	0.141

Standard errors in parentheses. Significance levels at 10% (\*), 5% (\*\*), 1% (\*\*\*).

TABLE 6. Regression results for prevention types for men

	Exercising (odds ratio – logit)		Screenings		Vaccinations	
	Age < 50 years	Age > 50 years	Age < 50 years	Age > 50 years	Age < 50 years	Age > 50 years
<b>Interactions</b>						
Exercising			0.069** (0.033)	0.067 (0.062)	0.064 (0.049)	0.025 (0.039)
Screenings	1.422** (0.250)	1.055 (0.131)			0.230*** (0.038)	0.149*** (0.034)
Vaccination	1.387* (0.235)	1.027 (0.129)	0.122*** (0.026)	0.220*** (0.052)		
Information-related						
Caregiver	1.556* (0.367)	1.151 (0.179)	0.050 (0.033)	0.048 (0.062)	0.060 (0.046)	0.053 (0.041)
Information access	1.530** (0.256)	1.340** (0.168)	0.042 (0.028)	0.193*** (0.054)	0.006 (0.039)	0.038 (0.036)
PD	0.896 (0.167)	1.306 (0.221)	0.311*** (0.027)	0.436*** (0.065)	0.133*** (0.039)	0.191*** (0.050)
<b>Control variables</b>						
Age in years (baseline: 18–34)						
35 to 49	0.783 (0.148)		0.025 (0.026)		–0.031 (0.039)	
65 to 74		1.005 (0.150)		0.132** (0.062)		0.064 (0.043)
75+		0.730* (0.126)		–0.075 (0.075)		–0.010 (0.053)

	Exercising (odds ratio – logit)		Screenings		Vaccinations	
	Age < 50 years	Age > 50 years	Age < 50 years	Age > 50 years	Age < 50 years	Age > 50 years
<b>Preferred race (baseline: none)</b>						
White	1.199 (0.551)	0.601 (0.240)	−0.161** (0.074)	−0.024 (0.142)	0.119 (0.111)	0.1701 (0.119)
Hispanic	0.910 (0.497)	0.360** (0.175)	−0.091 (0.085)	0.113 (0.209)	0.176 (0.130)	0.207 (0.157)
Black	0.866 (0.431)	0.557 (0.213)	0.049 (0.080)	−0.042 (0.161)	0.003 (0.119)	0.093 (0.132)
Asian	0.530 (0.297)	1.525 (1.037)	−0.018 (0.102)	−0.426** (0.177)	−0.182 (0.154)	−0.394** (0.186)
Married	0.847 (0.161)	1.057 (0.137)	0.014 (0.028)	0.120** (0.054)	0.074* (0.040)	−0.008 (0.038)
Children	1.038 (0.073)	0.856 (0.085)	−0.012 (0.010)	−0.015 (0.044)	0.003 (0.015)	0.037 (0.023)
Education	1.925*** (0.339)	2.026*** (0.252)	0.005 (0.026)	−0.027 (0.054)	0.079** (0.037)	0.097*** (0.036)
<b>Employment status (baseline: employed)</b>						
Self-employed	0.810 (0.188)	0.789 (0.153)	−0.028 (0.038)	−0.072 (0.071)	−0.027 (0.046)	−0.052 (0.051)
Student	2.951*** (1.167)	15.428* (23.216)	0.137*** (0.046)	−0.374 (0.317)	0.088 (0.071)	−0.418* (0.250)
Retired	0.495 (0.409)	0.998 (0.173)	0.069 (0.166)	−0.007 (0.066)	−0.121 (0.244)	0.078* (0.047)
Out of work	0.652 (0.185)	0.729 (0.155)	0.243*** (0.046)	0.127 (0.097)	−0.072 (0.071)	−0.009 (0.066)

	Exercising (odds ratio – logit)		Screenings		Vaccinations	
	Age < 50 years	Age > 50 years	Age < 50 years	Age > 50 years	Age < 50 years	Age > 50 years
<b>Income level (baseline: &lt;\$25,000)</b>						
from \$25,000 to \$50,000	1.117 (0.261)	0.908 (0.150)	0.017 (0.038)	−0.069 (0.072)	−0.040 (0.054)	−0.074 (0.050)
>\$50,000	2.149*** (0.574)	1.198 (0.224)	0.001 (0.036)	0.031 (0.078)	0.062 (0.056)	−0.041 (0.054)
Healthcare coverage	0.570** (0.145)	0.696 (0.196)	0.156*** (0.040)	0.346*** (0.103)	0.027 (0.052)	0.202*** (0.072)
Subjective health	1.250*** (0.108)	1.461*** (0.085)	−0.014 (0.012)	0.021 (0.023)	0.026 (0.019)	−0.007 (0.017)
Health-risk tolerance	0.912 (0.180)	0.779 (0.122)	−0.079*** (0.030)	−0.071 (0.069)	0.042 (0.041)	−0.088** (0.045)
Constant	1.571 (1.028)	1.846 (0.944)	0.249** (0.097)	0.015 (0.202)	0.187 (0.148)	0.274* (0.157)
N	3,719	5,877	3,719	5,877	3,719	5,877
R <sup>2</sup>	0.133	0.139	0.221	0.097	0.143	0.120

Standard errors in parentheses. Significance levels at 10% (\*), 5% (\*\*), 1% (\*\*\*).