Online Appendix

Inattention and Switching Costs
as Sources of Inertia in Medicare Part D

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	Base coefficient $\boldsymbol{\beta}^0, \gamma^0, \sigma_\gamma^2, \eta$	SE	Average marginal effects on choosing plan	
			unconditional	cond. on attention
OOP cost [\$1000]	1.012	(0.009)	-0.009	-0.009
Annual premium [\$1000]	2.050	(0.006)	-0.026	-0.026
Deductible amount [\$1000]	-5.649	(0.052)	-0.019	-0.019
ICL amount [\$1000]	1.221	(0.155)	0.004	0.004
No gap coverage [D]	-0.763	(0.030)	-0.003	-0.003
Default plan [D]			0.813	0.813
Coefficient mean (γ^0)	8.024	(0.024)		
Coefficient variance (σ_γ^2)	2.490	(0.013)		
Variance of OOP cost [(\$1000)^2]	-0.287	(0.010)	-0.001	-0.001
Acuity effect in error variance (η)	–	(–)		
Correlation of unobservables (ρ)	–	(–)		

Notes: The base parameters $\boldsymbol{\beta}^0, \gamma^0, \sigma_\gamma^2$ denote the non-interacted components of the coefficients of plan-characteristics; the model does not include interaction terms with acuity. The unconditional average marginal effect of the default plan dummy measures inertia. As Model I does not include an attention stage, unconditional marginal effects and marginal effects conditional on attention are identical. The plan-choice stage also includes five dummy variables for the largest plans.

Table A2: Attention stage and determinants of acuity (Model II)

	Coefficient	SE	Average marginal effects on attention	Average marginal effects on switching
Attention stage (ζ)				
Constant	-0.558	(0.062)		
Part D experience in $t-1$				
Gap coverage [D]	-1.809	(0.038)	-0.338	-0.085
Hit the gap [D]	0.546	(0.043)	0.118	0.027
Gap coverage & hit the gap [D]	-0.277	(0.059)	-0.059	-0.014
Hit catastrophic region [D]	0.014	(0.066)	0.003	0.001
Changes in features of the $t-1$ plan				
Plan consolidated [D]	0.450	(0.045)	0.097	0.022
Change of premium [$1000]	4.281	(0.105)	0.924	0.210
Change of deductible [$1000]	2.977	(0.279)	0.643	0.146
Change of ICL [$1000]	0.628	(0.329)	0.136	0.031
OOP cost effect of formulary change [$1000]	0.498	(0.068)	0.107	0.024
Tiers with increases in copayments [share]	-0.045	(0.041)	-0.010	-0.002
Switch between copay and coinsurance [D]	0.866	(0.044)	0.185	0.043
Health shocks and health care use in $t-1$				
Onset of costly condition [D]	-0.050	(0.038)	-0.011	-0.002
Onset of cheap condition [D]	-0.054	(0.027)	-0.012	-0.003
Five or more doctor visits [D]	0.130	(0.031)	0.028	0.006
At least one ER visit [D]	-0.050	(0.031)	-0.011	-0.002
At least one hospital stay [D]	-0.065	(0.037)	-0.014	-0.003
Determinants of acuity (α)				
Male [D]	-0.116	(0.026)	-0.025	-0.006
Non-white [D]	-0.541	(0.048)	-0.114	-0.026
Age 70–79 years [D]	-0.258	(0.033)	-0.055	-0.012
Age 80 years or older [D]	-0.520	(0.038)	-0.109	-0.025
PDP experience [years]	-0.035	(0.023)	-0.008	-0.002
Low education [ZIP-code share]	-0.835	(0.137)	-0.180	-0.041
Low income [ZIP-code share]	-0.767	(0.204)	-0.166	-0.038
High income [ZIP-code share]	-1.394	(0.098)	-0.301	-0.068
Ever had depression [D]	-0.032	(0.030)	-0.007	-0.002
Standard deviation of unobserved acuity (σ_c)	–	(–)		

Notes: Average marginal effects on the probability of paying attention and the probability of switching plans. [D] indicates that variable is a dummy. The attention stage also includes year dummies.

	Base coefficient $\boldsymbol{\beta}^0, \gamma^0, \sigma_\gamma^2, \eta$	SE	Average marginal effects on choosing plan	
			unconditional	cond. on attention
OOP cost [$1000]	1.154	(0.010)	-0.010	-0.021
Annual premium [$1000]	2.230	(0.006)	-0.029	-0.060
Deductible amount [$1000]	-6.121	(0.059)	-0.019	-0.040
ICL amount [$1000]	1.202	(0.170)	0.004	0.008
No gap coverage [D]	-0.474	(0.035)	-0.002	-0.004
Default plan [D]			0.816	0.614
Coefficient mean (γ^0, γ^q)	6.170	(0.034)		
Coefficient variance (σ_γ^2)	2.369	(0.027)		
Variance of OOP cost [($1000)^2]	-0.291	(0.011)	-0.001	-0.002
Acuity effect in error variance (η)	−	(−)		
Correlation of unobservables (ρ)	−	(−)		

Notes: The base parameters $\boldsymbol{\beta}^0, \gamma^0, \sigma_\gamma^2$ denote the non-interacted components of the coefficients of plan-characteristics; the model does not include interaction terms with acuity. The unconditional average marginal effect of the default plan dummy measures inertia. The conditional average marginal effects are weighted with the attention probabilities so that they refer to the attentive individuals. The plan-choice stage also includes five dummy variables for the largest plans.

Table A4: Attention stage and determinants of acuity (Model III)

	Coefficient	SE	Average marginal effects	
			on attention	on switching
Attention stage (ζ)				
Constant	-2.556	(0.067)		
Part D experience in $t-1$				
Gap coverage [D]	-1.224	(0.050)	-0.111	-0.057
Hit the gap [D]	0.503	(0.038)	0.055	0.027
Gap coverage & hit the gap [D]	-0.331	(0.068)	-0.033	-0.016
Hit catastrophic region [D]	0.043	(0.081)	0.005	0.002
Changes in features of the $t-1$ plan				
Plan consolidated [D]	0.148	(0.046)	0.016	0.008
Change of premium [$1000]	6.654	(0.116)	0.701	0.345
Change of deductible [$1000]	2.637	(0.230)	0.278	0.137
Change of ICL [$1000]	0.272	(0.332)	0.029	0.014
OOP cost effect of formulary change [$1000]	0.647	(0.075)	0.068	0.034
Tiers with increases in copayments [share]	-0.250	(0.044)	-0.026	-0.013
Switch between copay and coinsurance [D]	0.748	(0.042)	0.086	0.042
Health shocks and health care use in $t-1$				
Onset of costly condition [D]	-0.055	(0.040)	-0.006	-0.003
Onset of cheap condition [D]	-0.063	(0.029)	-0.007	-0.003
Five or more doctor visits [D]	0.105	(0.034)	0.011	0.005
At least one ER visit [D]	-0.055	(0.033)	-0.006	-0.003
At least one hospital stay [D]	-0.063	(0.039)	-0.007	-0.003
Determinants of acuity (α)				
Male [D]	-0.130	(0.030)	-0.013	-0.007
Non-white [D]	-0.629	(0.064)	-0.060	-0.030
Age 70–79 years [D]	-0.255	(0.036)	-0.026	-0.013
Age 80 years or older [D]	-0.594	(0.043)	-0.057	-0.028
PDP experience [years]	0.014	(0.024)	0.001	0.001
Low education [ZIP-code share]	-1.141	(0.158)	-0.120	-0.059
Low income [ZIP-code share]	-0.589	(0.233)	-0.062	-0.031
High income [ZIP-code share]	-1.411	(0.117)	-0.149	-0.073
Ever had depression [D]	-0.073	(0.036)	-0.008	-0.004
Standard deviation of unobserved acuity (σ_c)	-1.920	(0.035)		

Notes: Average marginal effects on the probability of paying attention and the probability of switching plans. [D] indicates that variable is a dummy. The attention stage also includes year dummies.

	Base coefficient $\boldsymbol{\beta}^0, \gamma^0, \sigma_\gamma^2, \eta$	SE	Average marginal effects on choosing plan	
			unconditional	cond. on attention
OOP cost [$1000]	1.197	(0.009)	-0.010	-0.041
Annual premium [$1000]	2.259	(0.006)	-0.029	-0.119
Deductible amount [$1000]	-5.855	(0.061)	-0.018	-0.073
ICL amount [$1000]	1.090	(0.172)	0.003	0.014
No gap coverage [D]	-0.626	(0.036)	-0.002	-0.010
Default plan [D]			0.831	0.307
Coefficient mean (γ^0, γ^q)	3.750	(0.052)		
Coefficient variance (σ_γ^2)	1.272	(0.062)		
Variance of OOP cost [($1000)^2$]	-0.275	(0.011)	-0.001	-0.003
Acuity effect in error variance (η)	−	(−)		
Correlation of unobservables (ρ)	−	(−)		

Notes: The base parameters $\boldsymbol{\beta}^0, \gamma^0, \sigma_\gamma^2$ denote the non-interacted components of the coefficients of plan-characteristics; the model does not include interaction terms with acuity. The unconditional average marginal effect of the default plan dummy measures inertia. The conditional average marginal effects are weighted with the attention probabilities so that they refer to the attentive individuals. The plan-choice stage also includes five dummy variables for the largest plans.

Table A6: Attention stage and determinants of acuity (Model IV)

	Coefficient	SE	Average marginal effects on attention	Average marginal effects on switching
Attention stage (ζ)				
Constant	-3.165	(0.061)		
Part D experience in $t-1$				
Gap coverage [D]	-0.820	(0.044)	-0.068	-0.042
Hit the gap [D]	0.681	(0.034)	0.066	0.041
Gap coverage & hit the gap [D]	-0.490	(0.065)	-0.042	-0.026
Hit catastrophic region [D]	0.271	(0.072)	0.026	0.016
Changes in features of the $t-1$ plan				
Plan consolidated [D]	-0.088	(0.043)	-0.008	-0.005
Change of premium [$1000]	7.165	(0.109)	0.654	0.403
Change of deductible [$1000]	2.245	(0.216)	0.205	0.126
Change of ICL [$1000]	0.805	(0.326)	0.074	0.045
OOP cost effect of formulary change [$1000]	0.579	(0.070)	0.053	0.033
Tiers with increases in copayments [share]	-0.383	(0.042)	-0.035	-0.022
Switch between copay and coinsurance [D]	0.677	(0.038)	0.067	0.042
Health shocks and health care use in $t-1$				
Onset of costly condition [D]	-0.065	(0.039)	-0.006	-0.004
Onset of cheap condition [D]	-0.091	(0.027)	-0.008	-0.005
Five or more doctor visits [D]	0.124	(0.032)	0.011	0.007
At least one ER visit [D]	-0.019	(0.032)	-0.002	-0.001
At least one hospital stay [D]	-0.024	(0.037)	-0.002	-0.001
Determinants of acuity (α)				
Male [D]	-0.115	(0.033)	-0.010	-0.006
Non-white [D]	-0.652	(0.074)	-0.054	-0.033
Age 70–79 years [D]	-0.255	(0.038)	-0.022	-0.014
Age 80 years or older [D]	-0.716	(0.046)	-0.059	-0.036
PDP experience [years]	-0.051	(0.021)	-0.005	-0.003
Low education [ZIP-code share]	-1.347	(0.174)	-0.123	-0.076
Low income [ZIP-code share]	-0.491	(0.259)	-0.045	-0.028
High income [ZIP-code share]	-1.508	(0.128)	-0.138	-0.085
Ever had depression [D]	-0.216	(0.040)	-0.019	-0.012
Standard deviation of unobserved acuity (σ_c)	2.262	(0.039)		

Notes: Average marginal effects on the probability of paying attention and the probability of switching plans. [D] indicates that variable is a dummy. The attention stage also includes year dummies.

Table A7: Plan-choice stage (Model IV)

	Base coefficient $\boldsymbol{\beta}^0, \gamma^0, \sigma^2_\gamma, \eta$	SE	Average marginal effects on choosing plan	
			unconditional	cond. on attention
OOP cost [\$1000]	0.985	(0.011)	-0.011	-0.047
Annual premium [\$1000]	2.041	(0.009)	-0.031	-0.136
Deductible amount [\$1000]	-4.340	(0.059)	-0.017	-0.077
ICL amount [\$1000]	0.712	(0.132)	0.003	0.013
No gap coverage [D]	-0.473	(0.030)	-0.002	-0.010
Default plan [D]			0.828	0.240
Coefficient mean (γ^0, γ^q)	2.421	(0.037)		
Coefficient variance (σ^2_γ)	0.979	(0.033)		
Variance of OOP cost [(\$1000)^2]	-0.188	(0.009)	-0.001	-0.003
Acuity effect in error variance (η)	-0.329	(0.007)		
Correlation of unobservables (ρ)	−	(−)		

Notes: The base parameters $\boldsymbol{\beta}^0, \gamma^0, \sigma^2_\gamma$ denote the non-interacted components of the coefficients of plan-characteristics; the model does not include interaction terms with acuity. The unconditional average marginal effect of the default plan dummy measures inertia. The conditional average marginal effects are weighted with the attention probabilities so that they refer to the attentive individuals. The plan-choice stage also includes five dummy variables for the largest plans.