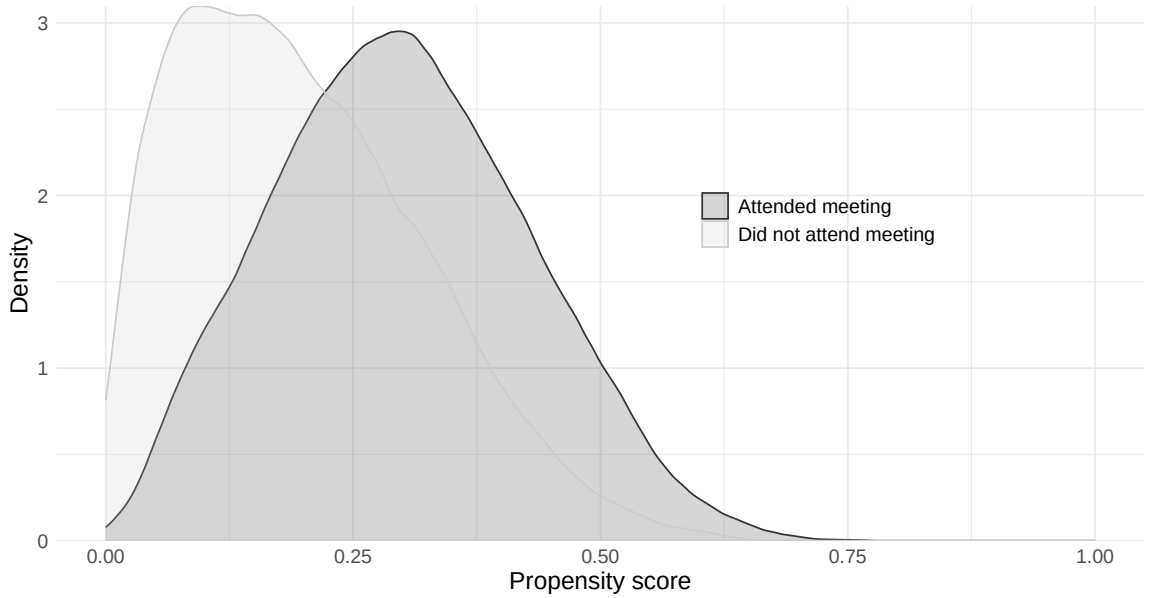
Take-up of Social Benefits: Experimental Evidence from France

Laura Castell, Marc Gurgand, Clément Imbert and Todor Tochev

Online Appendix

A Appendix Figures

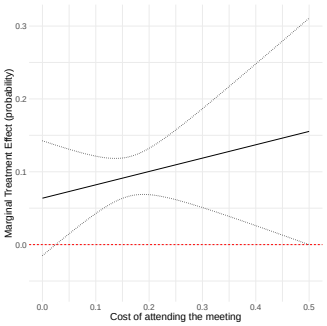
Figure A1: Propensity Score



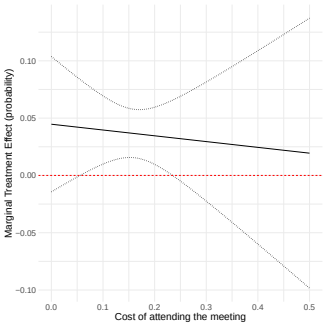
Note: The figure presents the kernel density estimate of the distribution of the propensity score, which is the probit prediction of meeting attendance based on treatment assignment and control variables chosen by the double lasso. The estimates are presented in Appendix Table B17. See Section 3 for more details.

Figure A2: Marginal treatment effect (MTE) on benefit take-up

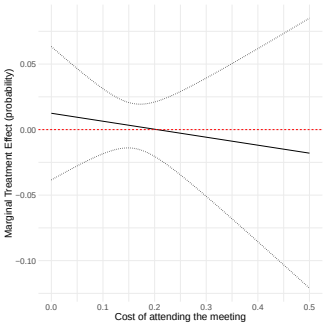
(a) Unobserved Component, All Benefits



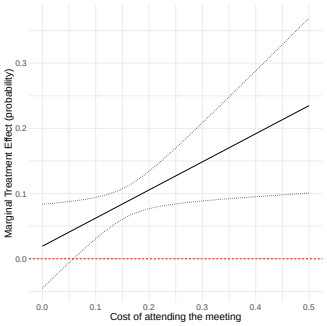
(b) Unobserved Component, Family Benefits



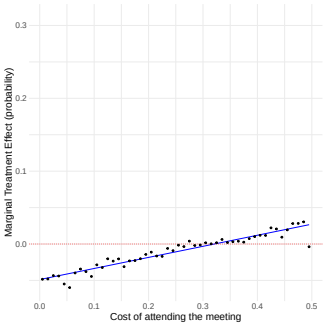
(c) Unobserved Component, Health Benefits



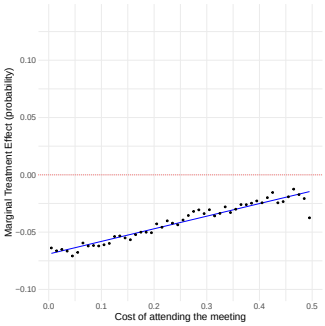
(d) Unobserved Component, Income Benefits



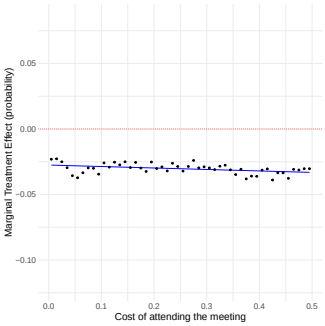
(e) Observed Component, All Benefits



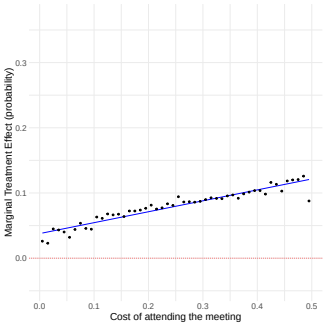
(f) Observed Component, Family Benefits



(g) Observed Component, Health Benefits



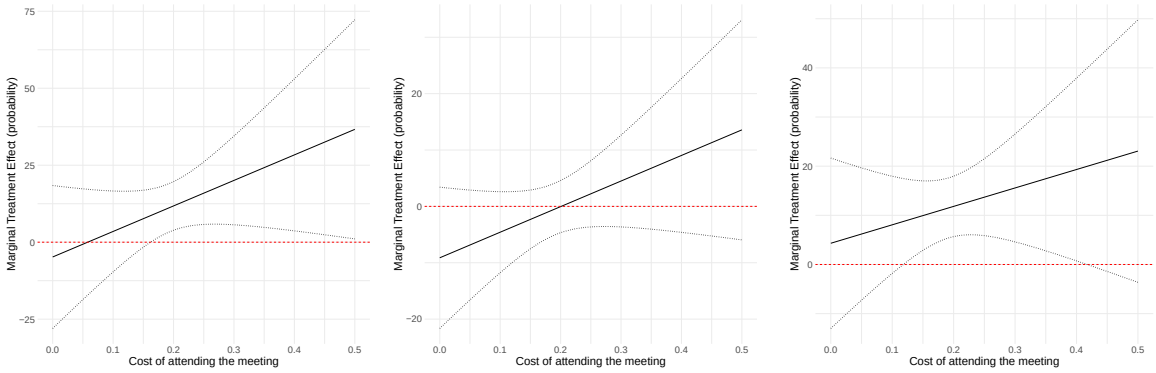
(h) Observed Component, Income Benefits



Note: panels a and b present the relationship between the marginal treatment effect on any new benefit take-up and the unobserved cost from participating to the meeting with social services. Take-up is measured using the preferred measure, a dummy variable which is 1 if the individual has was registered as receiving any benefit from the corresponding benefit group at any point since the start of the intervention and that benefit was not received at baseline, and 0 otherwise. It is measured over six months since the start of the intervention. Panel (a) presents the results for all benefits, and Panel (b) for income benefits only. The linear relationship is obtained from the estimates in Table 6, evaluated at the mean of the relevant sample covariates. 90% confidence intervals plotted. Standard errors are obtained through 500 bootstrap replications of the first and second stages. See Section 3 for more details. The figures c and d presents the relationship between the observable component of the MTE (i.e the treatment heterogeneity based on observables) and the propensity to attend the meeting for all benefits (Panel c) and income benefits (Panel d). The observed component of the MTE is computed as $X_i\, c$ from equation 6. The cost of attending the meeting is the propensity score transformed by $0.5 - p(\widehat{X_i, Z_i})$, in order to facilitate comparison with Panels (a), (b), (c), and (d). We have formed 50 bins of the propensity score (of 1 points width), and computed the averages $X_i\, c$ in each bin, which are represented by the black points. The blue line is a linear adjustment.

Figure A3: Marginal treatment effect (MTE) on total value of benefits, sample known to social services at baseline

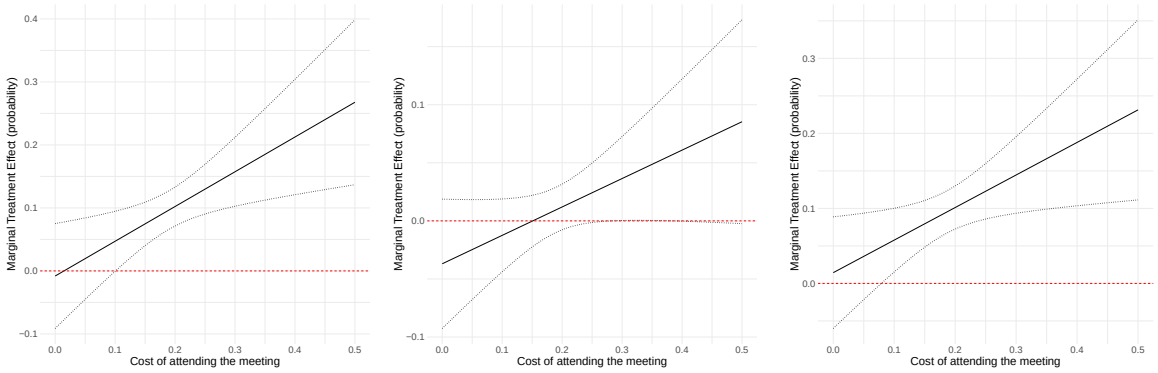
(a) All benefits (b) Family Benefits (c) Income Benefits



Note: This figure presents the relationship between the marginal treatment effect on the monthly amount of benefits received (including zeros when no new benefit was received) and the unobserved cost from participating to the meeting with social services, estimated on the sample of individuals known to social services at baseline. Panel (a) presents the results for all benefits, Panel (b) for family benefits, and Panel (c) for income benefits only. The linear relationship is obtained from the estimates in Table B15, evaluated at the mean of the relevant sample covariates. 90% confidence intervals plotted. Standard errors are obtained through 500 bootstrap replications of the first and second stage. See Section 3 for more details.

Figure A4: Marginal treatment effect (MTE) on benefit take-up, sample known to social services at baseline

(a) All benefits (b) Family Benefits (c) Income Benefits



Note: The figure presents the relationship between the marginal treatment effect on new benefit take-up and the unobserved cost from participating to the meeting with social services, estimated on the sample of individuals known to social services at baseline. New benefit take-up is measured using the preferred measure, a dummy variable equal to 1 if the individual was registered as receiving any benefit from the corresponding benefit group at any point since the start of the intervention and that benefit was not received at baseline, and 0 otherwise. Panel (a) presents the results for all benefits, Panel (b) for family benefits, and Panel (c) for income benefits only. The linear relationship is obtained from the estimates in Table B16, evaluated at the mean of the relevant sample covariates. 90% confidence intervals plotted. Standard errors are obtained through 500 bootstrap replications of the first and second stage. See Section 3 for more details.

B Appendix Tables

Table B1: List of social benefits included in the study

Benefit Type	Name of the Benefit	Caisse / Agency
Panel A: Family Benefits		
Family	Allocation familiale (AF)	CNAF
Family	Allocation de soutien familial (ASF)	CNAF
Family	Prestation d'accueil du jeune enfant (PAJE)	CNAF
Family	Allocation de rentrée scolaire (ARS)	CNAF
Housing	Allocation personalisée au logement (APL)	CNAF
Housing	Allocation de logement familiale (ALF)	CNAF
Housing	Allocation de logement sociale (ALS)	CNAF
Disability	Allocation adulte handicapé (AAH)	CNAF
Disability	Allocation d'éducation de l'enfant handicapé	CNAF
Disability	Allocation supplémentaire d'invalidité (ASI)	CNAM
Panel B: Health Benefits		
Health Insurance	Aide à l'acquisition d'une couverture maladie complémentaire (ACS)	CNAM
Health Insurance	Couverture maladie universelle complémentaire (CMU-C)	CNAM
Panel C: Income benefits		
Out-of-work	Revenu de solidarité active (RSA)	CNAF
In-work	Prime d'activité (PA)	CNAF

Table B2: Balance tests, full sample

Variable	Control	Neutral face-to-face	Neutral phone	Information face-to-face	Information phone	Stigma face-to-face	Stigma phone	P-value joint F-test	N
Panel A: Socio-demographic variables									
Married	0.3263	0.0008	-0.0034	0.0066	0.0068	-0.0043	0.0004	0.900	54418
Number of children (Pole Emploi)	0.7345	-0.0238	0.0137	-0.0101	0.0248	-0.0125	-0.0109	0.497	54418
Age in years	35.2695	0.1216	0.0719	-0.1832	0.0157	-0.0792	-0.1973	0.835	54418
Female	0.4715	0.0180	0.0091	-0.0021	0.0156	0.0026	0.0079	0.187	54418
Education: High school or less	0.1794	-0.0098	-0.0054	0.0058	0.0008	-0.0055	-0.0091	0.339	54418
Education: Missing	0.0055	0.0017	-0.0024	0.0009	0.0012	-0.0006	-0.0010	0.065	54418
Education: CAP/BEP	0.3501	0.0068	0.0036	-0.0007	-0.0021	-0.0025	0.0138	0.650	54418
Education: Bac general	0.2487	-0.0009	-0.0029	-0.0033	-0.0061	0.0063	-0.0041	0.887	54418
Education: Higher education	0.2218	0.0039	0.0046	-0.0018	0.0074	0.0017	-0.0006	0.927	54418
French national	0.8505	0.0078	0.0048	-0.0043	-0.0086	-0.0019	0.0025	0.373	54418
EU national	0.0357	0.0012	-0.0008	0.0006	0.0064	0.0039	0.0054	0.314	54418
Non-EU European national	0.0061	-0.0008	0.0010	-0.0001	-0.0003	-0.0012	-0.0011	0.839	54418
Rest of the world	0.1070	-0.0087	-0.0053	0.0025	0.0021	-0.0006	-0.0064	0.367	54418
Years of experience in target job	5.6770	0.0761	0.0394	-0.0715	-0.0491	-0.0364	0.1187	0.884	54418
Unemployment duration in months	11.9919	-0.3044	-0.3176	-0.5286	0.3591	-0.1206	-0.5569	0.111	54418
Monthly unemployment benefit (€)	435.5438	3.2870	9.8970	4.4011	12.2580	7.5876	-1.7621	0.657	54418
CNAF beneficiary	0.5793	-0.0051	-0.0016	0.0051	-0.0021	-0.0066	0.0001	0.947	54418
Panel B: Baseline benefit usage									
Log daily ref. salary (euros)	3.8480	0.0177	0.0073	-0.0019	-0.0015	-0.0076	0.0144	0.290	54418
Any benefit at baseline	0.4763	-0.0026	0.0078	-0.0037	0.0090	-0.0023	0.0002	0.845	54418
Any family benefit at baseline	0.3639	-0.0025	0.0011	0.0030	0.0101	-0.0018	0.0052	0.890	54418
Any health benefit at baseline	0.1636	-0.0033	0.0015	-0.0019	0.0031	-0.0059	0.0030	0.906	54418
Any income benefit at baseline	0.1668	0.0092	0.0086	-0.0025	0.0062	-0.0025	0.0032	0.484	54418
AF at baseline	0.1553	-0.0095	0.0012	0.0026	0.0089	-0.0039	-0.0046	0.342	54418
ASF at baseline	0.0361	0.0030	-0.0034	-0.0014	0.0019	-0.0026	0.0012	0.658	54418
Any AL at baseline	0.3172	-0.0015	0.0000	0.0017	0.0075	-0.0025	0.0060	0.940	54418
AAH at baseline	0.0126	0.0017	-0.0020	-0.0010	-0.0014	-0.0004	-0.0012	0.736	54418
AEEH at baseline	0.0084	0.0003	-0.0011	0.0006	0.0026	0.0019	-0.0008	0.543	54418
PAJE: Prime à la naissance	0.0157	-0.0015	-0.0007	0.0002	0.0016	-0.0015	-0.0028	0.701	54418
PAJE: Allocation de base	0.0655	-0.0058	-0.0028	0.0044	0.0066	-0.0043	0.0009	0.212	54418
PAJE: Prestation partagée d'éducation de l'enfant	0.0042	0.0005	0.0012	-0.0003	-0.0005	0.0001	-0.0013	0.677	54418
PAJE: Complément de libre choix du mode de garde	0.0016	-0.0005	-0.0004	-0.0005	0.0005	-0.0002	-0.0002	0.885	54418
ACS at baseline	0.0017	0.0001	0.0005	0.0011	-0.0005	-0.0010	-0.0002	0.224	54418
CMUC at baseline	0.1626	-0.0043	0.0008	-0.0023	0.0036	-0.0051	0.0032	0.894	54418
ASI at baseline	0.0003	0.0006	0.0000	0.0002	0.0002	-0.0003	0.0000	0.011	54418
RSA at baseline	0.0718	0.0053	0.0049	-0.0004	0.0025	-0.0030	0.0045	0.613	54418
PA at baseline	0.1080	0.0053	0.0072	-0.0046	0.0018	0.0004	0.0007	0.647	54418

Note: The first column presents the control group mean for the row variable. Each subsequent column presents the difference between the corresponding treatment group mean and the control group mean. The penultimate column presents the p-value of the joint F-test under the null of equality between the means of the control and all treatment groups.

Table B3: Balance tests, survey sample v full sample

Variable	Full sample	Survey sample	Difference	P-value
Panel A: Socio-demographic variables				
Married	0.327	0.318	-0.009	0.040
Number of children (Pole Emploi)	0.733	0.730	-0.003	0.815
Age in years	35.268	35.080	-0.187	0.080
Female	0.475	0.485	0.009	0.056
Education: High school or less	0.178	0.178	0.000	0.920
Education: Missing	0.005	0.007	0.001	0.053
Education: CAP/BEP	0.351	0.348	-0.003	0.449
Education: Bac general	0.248	0.243	-0.004	0.239
Education: Higher education	0.223	0.230	0.007	0.063
French national	0.850	0.852	0.002	0.586
EU national	0.037	0.034	-0.003	0.115
Non-EU European national	0.006	0.006	0.000	0.624
Rest of the world	0.106	0.106	0.000	0.964
Years of experience in target job	5.692	5.512	-0.180	0.005
Unemployment duration in months	11.819	11.751	-0.069	0.655
Monthly unemployment benefit (€)	445.214	444.675	-0.539	0.909
CNAF beneficiary	0.578	0.580	0.002	0.689
Panel B: Baseline benefit usage				
Log daily ref. salary (euros)	3.850	3.859	0.009	0.101
Any benefit at baseline	0.476	0.473	-0.003	0.510
Any family benefit at baseline	0.365	0.363	-0.002	0.728
Any health benefit at baseline	0.163	0.162	-0.001	0.765
Any income benefit at baseline	0.168	0.167	0.000	0.929
AF at baseline	0.155	0.154	-0.001	0.891
ASF at baseline	0.036	0.038	0.002	0.237
Any AL at baseline	0.318	0.317	0.000	0.931
AAH at baseline	0.012	0.012	-0.001	0.514
AEEH at baseline	0.009	0.008	0.000	0.695
PAJE: Prime à la naissance	0.015	0.015	-0.001	0.538
PAJE: Allocation de base	0.065	0.068	0.003	0.253
PAJE: Prestation partagée d'éducation de l'enfant	0.004	0.005	0.001	0.236
PAJE: Complément de libre choix du mode de garde	0.001	0.001	-0.001	0.103
ACS at baseline	0.002	0.002	0.000	0.857
CMUC at baseline	0.162	0.161	-0.001	0.819
ASI at baseline	0.000	0.000	0.000	0.477
RSA at baseline	0.074	0.075	0.001	0.562
PA at baseline	0.107	0.106	-0.002	0.543

Note: This table presents the results of a balance test between the full sample and the sample selected for a phone survey. The second and third columns present the group means of the variable indicated in the first column for the full and survey samples respectively. The fourth column presents the difference between the full sample mean and the survey sample mean. The fifth column presents the p-value associated with the test that the difference between the two samples is zero.

Table B4: Balance tests, survey sample

Variable	Control	Neutral face-to-face	Neutral phone	Information face-to-face	Information phone	Stigma face-to-face	Stigma phone	P-value joint F-test	N
Panel A: Socio-demographic variables									
Married	0.347	-0.019	0.011	-0.008	0.016	-0.022	-0.026	0.238	9969
Number of children (Pole Emploi)	0.767	-0.018	0.062	0.019	0.064	0.020	-0.056	0.173	9969
Age in years	35.994	-0.357	-0.232	-0.160	0.356	-0.374	-0.735	0.454	9969
Female	0.499	0.017	0.040	0.002	0.035	0.015	0.006	0.235	9969
Education: High school or less	0.160	0.003	-0.016	0.020	-0.005	0.002	-0.010	0.407	9969
Education: Missing	0.007	-0.001	0.000	-0.003	0.000	-0.004	-0.003	0.553	9969
Education: CAP/BEP	0.353	0.009	0.008	0.016	-0.005	-0.024	0.004	0.575	9969
Education: Bac general	0.243	-0.002	0.004	-0.021	0.006	0.027	0.010	0.290	9969
Education: Higher education	0.244	-0.009	0.005	-0.015	0.005	-0.005	-0.005	0.915	9969
French national	0.869	0.000	-0.003	-0.014	-0.018	-0.002	-0.002	0.762	9969
EU national	0.024	0.003	0.000	0.011	0.003	0.007	0.005	0.650	9969
Non-EU European national	0.005	-0.002	0.001	-0.001	0.003	-0.002	-0.001	0.673	9969
Rest of the world	0.100	-0.001	0.001	0.002	0.013	-0.002	-0.002	0.922	9969
Years of experience in target job	5.731	0.058	-0.086	-0.237	0.323	0.262	0.092	0.574	9969
Unemployment duration in months	12.437	-0.990	-0.325	-1.347	0.226	-0.611	-1.094	0.140	9969
Monthly unemployment benefit (€)	439.777	27.136	-11.288	11.490	13.044	20.506	-8.608	0.400	9969
CNAF beneficiary	0.602	0.000	-0.003	0.011	0.004	-0.018	-0.036	0.308	9969
Panel B: Baseline benefit usage									
Log daily reference salary (euros)	3.862	-0.012	0.020	-0.028	0.003	0.003	-0.001	0.635	9969
Any benefit at baseline	0.477	0.022	0.029	0.022	0.029	-0.003	-0.025	0.066	9969
Any family benefit at baseline	0.376	0.004	0.032	0.012	0.027	-0.002	-0.013	0.268	9969
Any health benefit at baseline	0.158	0.007	0.005	0.028	-0.009	0.003	-0.017	0.129	9969
Any income benefit at baseline	0.162	0.029	0.015	0.014	0.010	0.008	-0.009	0.262	9969
AF at baseline	0.167	-0.011	0.017	0.006	0.008	-0.003	-0.019	0.323	9969
ASF at baseline	0.037	0.005	-0.002	0.013	0.008	0.003	0.004	0.629	9969
Any AL at baseline	0.324	0.008	0.031	0.011	0.027	-0.005	-0.006	0.314	9969
AAH at baseline	0.014	0.004	-0.002	-0.001	0.000	-0.007	0.000	0.269	9969
AEEH at baseline	0.008	0.002	0.002	0.004	0.002	0.007	-0.003	0.257	9969
PAJE: Prime à la naissance	0.018	0.000	-0.005	0.002	0.003	-0.006	-0.003	0.479	9969
PAJE: Allocation de base	0.073	-0.003	-0.005	0.003	0.009	-0.011	-0.003	0.712	9969
PAJE: Prestation partagée d'éducation de l'enfant	0.006	0.004	-0.002	0.002	-0.002	-0.004	-0.004	0.038	9969
PAJE: Complément de libre choix du mode de garde	0.001	-0.001	0.001	0.001	0.002	0.001	0.000	0.114	9969
ACS at baseline	0.002	0.002	0.001	0.003	0.000	-0.002	0.000	0.009	9969
CMUC at baseline	0.158	0.005	0.003	0.027	-0.008	0.003	-0.018	0.159	9969
ASI at baseline	0.000	0.000	0.000	0.001	0.001	0.000	0.001	0.694	9969
RSA at baseline	0.073	0.009	0.006	0.010	0.004	-0.004	-0.011	0.404	9969
PA at baseline	0.101	0.025	0.011	0.004	0.003	0.011	0.002	0.463	9969

Note: The first column presents the control group mean for the row variable. Each subsequent column presents the difference between the corresponding treatment group mean and the control group mean. The penultimate column presents the p-value of the joint F-test under the null of equality between the means of the control and all treatment groups.

Table B5: Treatment compliance

	Attended any RDVDD			Attended phone RDVDD		
	(1)	(2)	(3)	(4)	(5)	(6)
Any invitation	0.2134			0.0834		
	(0.0025)			(0.0017)		
Invited to phone meeting		0.2218			0.1010	
		(0.0037)			(0.0027)	
Invited to face to face meeting		0.2055			0.0671	
		(0.0035)			(0.0022)	
Stigma reduction letter			0.2109			0.0800
			(0.0044)			(0.0030)
Neutral letter			0.2210			0.0873
			(0.0044)			(0.0030)
Enhanced information letter			0.2078			0.0826
			(0.0043)			(0.0030)
Num.Obs.	54 418	54 418	54 418	54 418	54 418	54 418
R2	0.171	0.172	0.171	0.085	0.089	0.086
P-value Phone = In person	-	0.001	-	-	0	-
P-value Neutral = Info	-	-	0.033	-	-	0.269
P-value Info = Stigma	-	-	0.62	-	-	0.534
P-value Stigma = Neutral	-	-	0.107	-	-	0.085
Control group mean	0	0	0	0	0	0

Note: Controls selected using the double-lasso method. Standard errors robust to heteroskedasticity. All specifications contain strata fixed effects. Control coefficients omitted for brevity. This table presents the effects of receiving an invitation letter on the probability of attending the RDVDE (columns 1 thorough 3) and on attending a RDVDE by phone, estimated using a linear probability model. Columns 1 and 4 show the effect of having received any invitation. Columns 2 and 5 show the effects separately by type of RDVDE individual was invited to (choice between phone or face-to-face meeting vs face-to-face meeting only). Columns 3 and 6 show the effect by type of invitation letter. Rows labelled "Phone = In person", "Neutral = Info", "Info = Stigma" and "Stigma = Neutral" present the p-value of a Wald test of equality between the corresponding coefficients.

Table B6: Effect of the different types of RDVDE invitations on compliance, corrected for possible contamination bias

	Attended any RDVDD			Attended phone RDVDD		
	(1)	(2)	(3)	(4)	(5)	(6)
Any invitation	0.2134			0.0834		
	(0.0025)			(0.0017)		
Invited to phone meeting		0.2218			0.1009	
		(0.0037)			(0.0027)	
Invited to face to face meeting		0.2054			0.0671	
		(0.0034)			(0.0022)	
Stigma reduction letter			0.2115			0.0800
			(0.0044)			(0.0030)
Neutral letter			0.2203			0.0871
			(0.0044)			(0.0030)
Enhanced information letter			0.2075			0.0825
			(0.0043)			(0.0030)
Num.Obs.	54 418	54 418	54 418	54 418	54 418	54 418
R^2	0.171	0.184	0.185	0.085	0.093	0.090
P-value Phone = In person	-	0.001	-	-	0	-
P-value Neutral = Info	-	-	0.038	-	-	0.269
P-value Info = Stigma	-	-	0.519	-	-	0.551
P-value Stigma = Neutral	-	-	0.163	-	-	0.09
Control group mean	0	0	0	0	0	0

Note: Controls selected using the double-lasso method. Standard errors robust to heteroskedasticity. All specifications contain strata fixed effects. The estimates in this table correct for possible contamination bias using the interacted regression solution (Goldsmith-Pinkham et al., 2024). Control coefficients omitted for brevity. This table presents the effects of receiving an invitation letter on the probability of attending the RDVDE (columns 1 thorough 3) and on attending a RDVDE by phone, estimated using a linear probability model. Columns 1 and 4 show the effect of having received any invitation. Columns 2 and 5 show the effects separately by type of RDVDE individual was invited to (choice between phone or face-to-face meeting vs face-to-face meeting only). Columns 3 and 6 show the effect by type of invitation letter. Rows labelled "Phone = In person", "Neutral = Info", "Info = Stigma" and "Stigma = Neutral" present the p-value of a Wald test of equality between the corresponding coefficients.

Table B7: Alternative measure of compliance: RDVDE meeting attendance and discussion of potential eligibility to social benefits

	Attended and benefit discussed			
	Any benefit	Any family benefit	Any health benefit	Any income benefit
	(1)	(2)	(3)	(4)
Any invitation	0.1940	0.1394	0.1072	0.1568
	(0.0024)	(0.0021)	(0.0019)	(0.0023)
Control group mean	0.0000	0.0000	0.0000	0.0000
Observations	54 418	54 418	54 418	54 418

Note: Controls selected using the double-lasso method. Standard errors are robust to heteroskedasticity. All specifications contain strata fixed effects. Control coefficients omitted for brevity. This table presents the treatment effects of being invited to the meeting on a dummy variable equal to 1 for people who attended and whose potential eligibility for any benefit was discussed (Column 1), estimated using a linear probability model. Columns 2, 3 and 4 present the effect by benefit group.

Table B8: Effect of invitations to the RDVDE on benefit take-up

	Any new benefit take-up			
	Any benefit	Family benefit	Health benefit	Income benefit
	(1)	(2)	(3)	(4)
Panel A: Over three months				
Any invitation	0.0140	0.0024	0.0011	0.0142
	(0.0034)	(0.0024)	(0.0019)	(0.0029)
Control group mean	0.2669	0.1099	0.0761	0.154
Observations	54418	54418	54418	54418
Panel B: Over six months				
Any invitation	0.0174	0.0054	0.0017	0.0150
	(0.0037)	(0.0027)	(0.0023)	(0.0031)
Control group mean	0.2669	0.1099	0.0761	0.154
Observations	54418	54418	54418	54418

Note: Controls selected using the double-lasso method. Standard errors robust to heteroskedasticity. All specifications contain strata fixed effects. Control coefficients omitted for brevity. Panels A and B present the average treatment effect of receiving an invitation letter on the preferred measure of benefit receipt, three and six months after baseline, estimated using a linear probability model. The preferred measure is a dummy variable which is 1 if the individual was registered as receiving any benefit from the corresponding benefit group at any point since the start of the intervention, and that benefit was not received at baseline, and 0 otherwise.

Table B9: Effect of the invitation on individual benefit receipt

Benefit	Any invitation	Std. Error
Family benefits		
Basic family benefit (AF)	0.00012	(0.00119)
Additional family benefit (ASF)	0.00055	(0.00094)
Housing benefit (AL)	0.00522	(0.00231)
Disability support (AAH)	0.00032	(0.00059)
Child disability support (AEEH)	0.00063	(0.00047)
Childcare support (PAJE)	0.00016	(0.00143)
Health benefits		
Health insurance complement (ACS)	-0.00151	(0.00124)
Basic health insurance (AF)	0.00368	(0.00200)
Disability supplement (ASI)	-0.00004	(0.00013)
Income benefits		
Guaranteed income (RSA)	0.00634	(0.00215)
Negative tax (PA)	0.01020	(0.00274)

Note: Controls selected using the double-lasso method. Standard errors are robust to heteroskedasticity. All specifications contain strata fixed effects. Control coefficients omitted for brevity. This table presents the treatment effect on the probability of having individual benefits six months after the start of the treatment, estimated using a linear probability model.

Table B10: Effect of the invitation on alternative measures of benefit take-up

	Benefit obtained six months after			
	Any benefit	Family benefit	Health benefit	Income benefit
	(1)	(2)	(3)	(4)
Panel A: Stock measure				
Any invitation	0.0068	0.0082	0.0009	0.0069
	(0.0036)	(0.0034)	(0.0033)	(0.0033)
Control group mean	0.4953	0.3598	0.2014	0.2004
Observations	54418	54418	54418	54418
Panel B: Flow measure				
Any invitation	0.0110	0.0043	0.0039	0.0063
	(0.0035)	(0.0026)	(0.0020)	(0.0027)
Control group mean	0.2250	0.0999	0.0579	0.1157
Observations	54418	54418	54418	54418
Panel C: Preferred measure				
Any invitation	0.0174	0.0054	0.0017	0.0150
	(0.0037)	(0.0027)	(0.0023)	(0.0031)
Control group mean	0.2669	0.1099	0.0761	0.1544
Observations	54418	54418	54418	54418

Note: Controls selected using the double-lasso method. Standard errors are robust to heteroskedasticity. All specifications contain strata fixed effects. Control coefficients omitted for brevity. This table presents the treatment effects of receiving the invitation on benefits take-up six months after the start of the intervention measured in three different ways, using a linear probability model. The stock measure is a dummy variable equal to 1 if an individual is registered as receiving any benefit at endline, and 0 otherwise. The flow measure is a dummy variable equal to 1 if the individual is registered as receiving any benefit at endline which was not received at baseline, and 0 otherwise. The preferred measure is a dummy variable which is 1 if the individual was registered as receiving any benefit from the corresponding benefit group at any point since the start of the intervention, and that benefit was not received at baseline, and 0 otherwise.

Table B11: Effects of the invitation on the number of benefits opened

	Total number of benefits obtained six months after			
	Any benefit	Family benefit	Health benefit	Income benefit
	(1)	(2)	(3)	(4)
Panel A: Stock measure				
Any invitation	0.0191	0.0085	0.0015	0.0086
	(0.0090)	(0.0062)	(0.0034)	(0.0038)
Control group mean	1.0130	0.5858	0.2069	0.2202
Observations	54418	54418	54418	54418
Panel B: Flow measure				
Any invitation	0.0172	0.0065	0.0040	0.0069
	(0.0057)	(0.0037)	(0.0021)	(0.0031)
Control group mean	0.3119	0.1270	0.0592	0.1257
Observations	54418	54418	54418	54418
Panel C: Preferred measure				
Any invitation	0.0256	0.0071	0.0021	0.0163
	(0.0067)	(0.0039)	(0.0024)	(0.0038)
Control group mean	0.4006	0.1434	0.0787	0.1784
Observations	54418	54418	54418	54418

Note: Controls selected using the double-lasso method. Standard errors are robust to heteroskedasticity. All specifications contain strata fixed effects. Control coefficients omitted for brevity. This table presents the treatment effect of receiving the invitation on the number of benefits received six months after the start of the treatment. The various measures are dummy variables defined at the individual benefit level, and summed together by benefit group. The stock measure is a dummy variable equal to 1 if an individual is registered as receiving the specific benefit, and 0 otherwise. The flow measure is a dummy variable equal to 1 if the individual is registered as receiving the specific benefit which was not received at baseline, and 0 otherwise. The preferred measure is a dummy variable which is 1 if the individual was registered as receiving any benefit from the corresponding benefit group at any point since the start of the intervention, and that benefit was not received at baseline, and 0 otherwise.

Table B12: Effect of the different types of RDVDE invitations on benefit take-up

	Any new benefit take-up over six months			
	Any benefit	Family benefit	Health benefit	Income benefit
Panel A: Phone or face-to-face invitation				
Invited to phone meeting	0.0187	0.0057	0.0036	0.0184
	(0.0047)	(0.0034)	(0.0029)	(0.0039)
Invited to face to face meeting	0.0160	0.0051	-0.0002	0.0121
	(0.0045)	(0.0033)	(0.0027)	(0.0038)
By phone = Face to face	0.6210	0.8850	0.2460	0.1730
Control group mean	0.2669	0.1099	0.0761	0.1544
Observations	54418	54418	54418	54418
Panel B: Type of invitation letter				
Neutral letter	0.0160	0.0052	0.0002	0.0147
	(0.0053)	(0.0038)	(0.0032)	(0.0045)
Enhanced information letter	0.0218	0.0049	0.0059	0.0162
	(0.0053)	(0.0039)	(0.0033)	(0.0045)
Stigma reduction letter	0.0140	0.0062	-0.0011	0.0142
	(0.0054)	(0.0039)	(0.0033)	(0.0045)
Neutral = Information	0.3840	0.9560	0.1650	0.7850
Information = Anti-stigma	0.2420	0.8020	0.0910	0.7290
Anti-stigma = Neutral	0.7550	0.8440	0.7450	0.9380
Control group mean	0.2669	0.1099	0.0761	0.1544
Observations	54418	54418	54418	54418

Note: Controls selected using the double-lasso method. Standard errors robust to heteroskedasticity. All specifications contain strata fixed effects. Control coefficients omitted for brevity. Panels A and B present the average treatment effect of receiving an invitation letter on the preferred measure of benefit receipt, six months after baseline, estimated using a linear probability model. The preferred measure is a dummy variable which is 1 if the individual was registered as receiving any benefit from the corresponding benefit group at any point since the start of the intervention, and that benefit was not received at baseline, and 0 otherwise. Panel A presents the effect of receiving an invitation to a phone or a face-to-face meeting. Panel B presents the effect of the different letter types: neutral letter, letter with an information flyer and a link to an online simulator, letter with an anti-stigma message. Rows labelled "By phone = Face to face", "Neutral = Information", "Information = Anti-stigma" and "Anti-stigma = Neutral" present the p-value of a Wald test of equality between the corresponding coefficients.

Table B13: Heterogeneous effects of the invitation on compliance

	Attended meeting			
	Distance to CNAF agency	Population 2	CAF beneficiary	Log daily reference income
	(1)	(2)	(3)	(4)
Any invitation	0.2223	0.2184	0.1725	0.2509
	(0.0050)	(0.0037)	(0.0037)	(0.0167)
Het. variable x Any invitation	−0.0333	−0.0101+	0.0707	−0.0098
	(0.0069)	(0.0053)	(0.0051)	(0.0043)
Invited to phone meeting	0.0166			
	(0.0074)			
Het. variable x Invited to phone meeting	−0.0008			
	(0.0102)			
Observations	54 418	54 418	54 418	54 418
Control group mean	0.0000	0.0000	0.0000	0.0000

Note: Controls selected using the double-lasso method. Standard errors are robust to heteroskedasticity. All specifications contain strata fixed effects. Control coefficients omitted for brevity. This table presents a heterogeneity analysis of the effect of having received any invitation on meeting attendance, estimated using a linear probability model. For column 1, the heterogeneity variable is a binary indicator for whether the individual lives in a postcode whose mean distance to the nearest CNAF branch is higher than the median for her stratum. In column 2, the heterogeneity variable is a binary indicator for the individual being less than three months away from the end of their rights to unemployment benefits. In column 3, the heterogeneity variable is attending a meeting with a certified social worker, rather than a social benefits adviser. In column 4, the heterogeneity variable is already having been registered as a beneficiary of CNAF administered benefits at least once. For column 5, the heterogeneity variable is the log of the daily reference income used in determining unemployment benefit amounts.

Table B14: Heterogeneous effects of the invitation on benefit take-up

	Any new benefit received over six months			
	Distance to CNAF agency	Population 2	CAF beneficiary	Log daily reference income
	(1)	(2)	(3)	(4)
Any invitation	0.0208	0.0130	0.0210	0.0619
	(0.0065)	(0.0049)	(0.0045)	(0.0248)
Het. variable x Any invitation	−0.0093	0.0087	−0.0063	−0.0115
	(0.0090)	(0.0068)	(0.0071)	(0.0063)
Invited to phone meeting	−0.0014			
	(0.0078)			
Het. variable x Invited to phone meeting	0.0079			
	(0.0109)			
Control group mean	0.2669	0.2669	0.2669	0.2669
Observations	54 418	54 418	54 418	54 418

Note: Controls selected using the double-lasso method. Standard errors are robust to heteroskedasticity. All specifications contain strata fixed effects. Control coefficients omitted for brevity. This table presents a heterogeneity analysis of the effect of having received any invitation on the probability of obtaining at least one benefit according to RNCPS data, estimated using a linear probability model. Benefit take-up is measured using the preferred measure, a dummy variable equal to 1 if the individual was registered as receiving any benefit from the corresponding benefit group at any point since the start of the intervention and that benefit was not received at baseline, and 0 otherwise. For column 1, the heterogeneity variable is a binary indicator for whether the individual lives in a postcode whose mean distance to the nearest CNAF branch is higher than the median for her stratum. In column 2, the heterogeneity variable is a binary indicator for the individual being less than three months away from the end of their rights to unemployment benefits. In column 3, the heterogeneity variable is attending a meeting with a certified social worker, rather than a social benefits adviser. In column 4, the heterogeneity variable is already having been registered as a beneficiary of CNAF administered benefits at least once. For column 5, the heterogeneity variable is the log of the daily reference income used in determining unemployment benefit amounts.

Table B15: Marginal Treatment Effect on benefit amounts, sample known to social services

	EUR per month, benefits not received at baseline		
	Any benefit	Family benefit	Income benefit
Propensity score	−13.8546	2.6152	−16.4698
	(18.3509)	(10.0669)	(13.6747)
Propensity score^2	41.4512	22.6960	18.7552
	(34.3698)	(18.6226)	(25.6636)
Strata fixed effects	Yes	Yes	Yes
Observations	30 337	30 337	30 337
R^2	0.040	0.021	0.042

Note: This table presents the MTE on the monthly amount of newly claimed (not present at baseline) benefits received. Estimation covers the sample of individuals already known to social services at baseline. The propensity score is obtained by a probit model of meeting attendance, based on treatment assignment and controls selected by the double lasso procedure in the first stage. Standard errors are obtained through 500 bootstrap replications of both stages. All specifications include strata fixed effects and controls used in the propensity score interacted with treatment probability. Control coefficients omitted for brevity.

Table B16: Marginal Treatment Effect estimates on benefit take-up, sample known to social services, measured using RNCPS data

	Any new benefit received at six months		
	Any benefit	Any family benefit	Any income benefit
Propensity score	−0.0364	0.0101	−0.0537
	(0.0682)	(0.0435)	(0.0602)
Propensity score^2	0.2758	0.1223	0.2170
	(0.1244)	(0.0837)	(0.1128)
Strata fixed effects	Yes	Yes	Yes
Observations	30 337	30 337	30 337
R^2	0.054	0.023	0.060

Note: Benefit take-up is measured using the preferred measure, a dummy variable equal to 1 if the individual was registered as receiving any benefit from the corresponding benefit group at any point since the start of the intervention and that benefit was not received at baseline, and 0 otherwise. The propensity score is obtained by a linear probability model of meeting attendance, based on treatment assignment and controls selected by lasso. Standard errors are obtained through 500 bootstrap replications of both stages. All specifications include strata fixed effects and controls used in the propensity score interacted with treatment probability. Control coefficients omitted for brevity.

Table B17: Marginal Treatment Effect first stage estimates

Variable	Main effect	Variable X Any invitation	Variable X Phone invitation
Female	0.001	0.082	0.021
	(0.008)	(0.030)	(0.041)
Higher Education	0.003	−0.064	0.043
	(0.008)	(0.035)	(0.049)
Age category 16 to 25	0.004	−0.342	0.112
	(0.007)	(0.041)	(0.058)
Age category 25 to 35	0.000	−0.121	−0.004
	(0.007)	(0.034)	(0.049)
Age category 55 plus	0.009	0.181	−0.153
	(0.013)	(0.053)	(0.074)
Foreign national	0.042	0.084	−0.019
	(0.017)	(0.041)	(0.055)
Divorced or separated	−0.015	0.051	0.111
	(0.008)	(0.048)	(0.069)
Married	−0.014	0.023	0.094
	(0.007)	(0.033)	(0.047)
Seeks employment in Performing Arts ROME sector	0.038	−0.289	0.169
	(0.025)	(0.153)	(0.207)
Unemployment reason - Termination (Other)	0.013	0.023	0.091
	(0.008)	(0.047)	(0.066)
Unemployment reason - End of contract	−0.005	−0.038	−0.028
	(0.008)	(0.035)	(0.049)
Unemployment reason - End of temporary worker assignment	0.016	−0.081	−0.057
	(0.013)	(0.053)	(0.073)
Unemployment reason - End of internship	0.016	0.149	−0.051
	(0.016)	(0.073)	(0.100)
Unemployment reason - End of illness or maternity	0.014	0.204	−0.099
	(0.013)	(0.064)	(0.091)
Unemployment reason - Released from prison	−0.040	−0.393	−0.289
	(0.034)	(0.259)	(0.434)
Monthly unemployment benefit amount - First quartile	−0.075	0.217	−0.090
	(0.009)	(0.043)	(0.060)
Monthly unemployment benefit amount - Second quartile	−0.083	0.106	−0.073
	(0.009)	(0.042)	(0.060)
Monthly unemployment benefit amount - Third quartile	−0.080	0.155	0.014
	(0.009)	(0.043)	(0.060)
Monthly unemployment benefit amount - Fourth quartile	−0.058	0.120	−0.027
	(0.010)	(0.046)	(0.064)
Seasonal contract sought	−0.020	−0.299	0.215
	(0.027)	(0.096)	(0.133)
Temporary work sought	−0.010	0.083	−0.007
	(0.009)	(0.045)	(0.063)
Annual salary in previous job - Second quartile	−0.006	0.111	−0.058
	(0.009)	(0.033)	(0.046)
Annual salary in previous job - Fourth quartile	0.015	−0.039	0.015
	(0.011)	(0.038)	(0.052)
Known to social services at baseline	−0.007	0.161	0.053
	(0.007)	(0.030)	(0.042)
Length of unemployment spell - Second quartile	−0.002	0.009	0.023
	(0.006)	(0.035)	(0.049)
Any invitation	5.230		
	(0.054)		
Phone invitation	−0.016		
	(0.074)		
Dist. (km) between city of residence and closest CNAF office		−0.003	−0.001
		(0.003)	(0.004)
Individual at end of unemployment benefit rights		−0.052	0.028
		(0.031)	(0.044)
Num.Obs.	53795	53795	53795
Std.Errors	Heteroskedasticity-robust	Heteroskedasticity-robust	Heteroskedasticity-robust
Strata fixed effects	Yes	Yes	Yes

Note: This table presents the estimated coefficients from a probit model predicting compliance (attendance at the meeting), estimated using the full sample. Coefficients reported in all columns are part of the same regression. We use as instruments a dummy for the treatment group, and a dummy for the phone meeting group. We also include socio-demographic controls selected by the double robust lasso procedure. We interact the instruments with each of the controls, as well as with two stratification variables (distance to nearest CNAF office and nearing the end of unemployment benefit rights). The first column presents coefficients for each control variable, the second column presents coefficients on each control variable interacted with a dummy for the treatment group, the third column presents coefficients on each control variable interacted with a dummy for the phone invitation group. The specification also includes randomization strata fixed effects. Standard errors are robust to heteroskedasticity.

Table B18: Significance of higher-polynomials in the second stage of the MTE

Outcome	Cubic only	Cubic and quartic
Any benefit, six months after	0.386	0.630
Family benefit, six months after	0.744	0.678
Health benefit, six months after	0.550	0.662
Income benefit, six months after	0.302	0.702

Note: This table presents the p-value of an F-test for joint nullity of the coefficients on a cubic and quartic polynomial of the propensity score in the second stage of the MTE estimation. Bootstrapped p-value with 500 replications.

Table B19: Balance tests for the online simulator

Variable	Control group mean	Invitation	Difference vs Control	P-value	Observations
Married	0.412	0.407	-0.004	0.529	40 000
Number of children	0.797	0.797	-0.001	0.965	40 000
Age	33.617	33.771	0.154	0.275	40 000
Female	0.506	0.508	0.002	0.756	40 000
Unfinished high-school or less	0.123	0.123	-0.001	0.872	40 000
Professional baccalaureate	0.306	0.318	0.012	0.154	40 000
General baccalaureate	0.258	0.256	-0.002	0.677	40 000
Higher education	0.229	0.224	-0.005	0.551	40 000
Foreigner	0.125	0.123	-0.001	0.882	40 000
ZUS resident	0.080	0.082	0.003	0.811	40 000
Years of experience in profession sought	5.328	5.268	-0.06	0.461	40 000
Unemployment duration in months	9.775	9.653	-0.122	0.340	40 000
Maximum benefit duration left (in days)	338.667	333.428	-5.238	0.091	30 597
Daily net benefit amount (in euros)	16.342	16.030	-0.312	0.104	40 000

Note: This table presents the average of each variable by treatment group, the difference between the invitation group and the control group and the p-value for the test under the null of no-difference. The unit of observation is the individual. The coefficients are obtained by regressing the row variable on the treatment variable (1=treatment group, 0=control group). For example, the first line shows that the proportion of married individuals in the control group is 41%, the same as in the treatment group, and that the difference between the two groups is not statistically significant.

Table B20: Effect of the invitation to the online simulator on the number of benefits opened

	Total number of benefits obtained over eight months			
	All benefits	Family benefit	Health benefits	Income benefits
Any invitation	0.0076	−0.0024	0.0059	0.0042
	(0.0154)	(0.0100)	(0.0048)	(0.0050)
Control group mean	0.9082	0.6018	0.1288	0.1776
Observations	40 000	40 000	40 000	40 000

Note: Controls selected using the double-lasso method. Standard errors are robust to heteroskedasticity. All specifications contain strata fixed effects. Control coefficients omitted for brevity. This table presents the treatment effects of being invited to use the online simulator on the total number of benefits obtained eight months after the start of the intervention.

Table B21: Controls used in ITT and LATE estimations

Outcome	Controls
Any benefit	Age category 25 to 35
	Age category 55 plus
	Annual salary in previous job - Fourth quartile
	Annual salary in previous job - Second quartile
	Annual salary in previous job - Third quartile
	Bac
	Children: Five or more children
	Children: Four children
	Children: One child
	Children: Two children
	Education: Higher education
	Experience in job sought - Fourth quartile
	Experience in job sought - Third quartile
	Family status: Divorced or separated
	Family status: Married
	Foreign national
	Known to social services at baseline
	Length of unemployment spell - Fourth quartile
	Length of unemployment spell - Third quartile
	Month of birth: December
	Monthly unemployment benefit amount - First quartile
	Monthly unemployment benefit amount - Fourth quartile
	Monthly unemployment benefit amount - Second quartile
	Monthly unemployment benefit amount - Third quartile
	Qualification: Manager
	Qualification: Unskilled construction worker
	Qualification: Unskilled worker
	Seeks employment in Commerce, Sales and Retail ROME sector
	Seeks employment in Industry ROME sector
	Seeks employment in Installation and Maintenance ROME sector
	Unemployment reason - End of contract
	Unemployment reason - End of illness or maternity
	Unemployment reason - End of self-employment
	Unemployment reason - End of temporary worker assignment
	Unemployment reason - Entry into CSP contract after termination for economic reasons
	Unemployment reason - Initial labour market entry
	Unemployment reason - Other
	Unemployment reason - Released from prison
	Unemployment reason - Return to work after more than 6 months
	Unemployment reason - Termination (Economic reasons)
	Unemployment reason - Termination (Other)
	Unemployment reason - Termination (Permanent contract by mutual agreement)

Table B21: Controls used in ITT and LATE estimations *(continued)*

Outcome	Controls
Family benefit	Age category 16 to 25
	Age category 25 to 35
	Age category 55 plus
	Annual salary in previous job - Fourth quartile
	Annual salary in previous job - Second quartile
	Children: Five or more children
	Children: One child
	Children: Three children
	Children: Two children
	Education: Higher education
	Education: Vocational degree
	Experience in job sought - Fourth quartile
	Experience in job sought - Third quartile
	Family status: Divorced or separated
	Family status: Married
	Female
	Foreign national
	Known to social services at baseline
	Length of unemployment spell - Fourth quartile
	Length of unemployment spell - Third quartile
	Month of birth: December
	Monthly unemployment benefit amount - First quartile
	Monthly unemployment benefit amount - Second quartile
	Qualification: Manager
	Qualification: Unskilled worker
	Seeks employment in Arts and Crafts ROME sector
	Seeks employment in Commerce, Sales and Retail ROME sector
	Seeks employment in Installation and Maintenance ROME sector
	Unemployment reason - End of CRP contract
	Unemployment reason - End of contract
	Unemployment reason - End of illness or maternity
	Unemployment reason - Initial labour market entry
	Unemployment reason - Termination (Permanent contract by mutual agreement)

Table B21: Controls used in ITT and LATE estimations *(continued)*

Outcome	Controls
Health benefit	Age category 16 to 25
	Annual salary in previous job - Fourth quartile
	Annual salary in previous job - Second quartile
	Annual salary in previous job - Third quartile
	Bac
	Children: Five or more children
	Children: Four children
	Children: One child
	Children: Three children
	Children: Two children
	Education: Higher education
	Experience in job sought - Fourth quartile
	Family status: Divorced or separated
	Family status: Married
	Foreign national
	Known to social services at baseline
	Length of unemployment spell - Fourth quartile
	Length of unemployment spell - Third quartile
	Month of birth: December
	Monthly unemployment benefit amount - First quartile
	Monthly unemployment benefit amount - Second quartile
	Qualification: Manager
	Qualification: Skilled worker
	Qualification: Supervisor
	Qualification: Technician, draughtsman
	Qualification: Unskilled worker
	Seeks employment in Communication, Media and Multimedia ROME sector
	Seeks employment in Industry ROME sector
	Seeks employment in Installation and Maintenance ROME sector
	Seeks employment in Transport and Logistics ROME sector
	Unemployment reason - End of contract
	Unemployment reason - Entry into CSP contract after termination for economic reasons
	Unemployment reason - First arrival in France
	Unemployment reason - Initial labour market entry
	Unemployment reason - Other
	Unemployment reason - Released from prison
	Unemployment reason - Return to work after more than 6 months
	Unemployment reason - Termination (Economic reasons)
	Unemployment reason - Termination (Other)
	Unemployment reason - Termination (Permanent contract by mutual agreement)
	Work type sought: Temporary

Table B21: Controls used in ITT and LATE estimations *(continued)*

Outcome	Controls
Income benefit	Age category 25 to 35
	Age category 55 plus
	Annual salary in previous job - Fourth quartile
	Annual salary in previous job - Second quartile
	Annual salary in previous job - Third quartile
	Bac
	Children: One child
	Children: Two children
	Education: Higher education
	Experience in job sought - First quartile
	Experience in job sought - Fourth quartile
	Family status: Married
	Known to social services at baseline
	Length of unemployment spell - Fourth quartile
	Length of unemployment spell - Third quartile
	Month of birth: December
	Monthly unemployment benefit amount - First quartile
	Monthly unemployment benefit amount - Fourth quartile
	Monthly unemployment benefit amount - Second quartile
	Monthly unemployment benefit amount - Third quartile
	Qualification: Unskilled construction worker
	Qualification: Unskilled worker
	Seeks employment in Commerce, Sales and Retail ROME sector
	Seeks employment in Health ROME sector
	Seeks employment in Installation and Maintenance ROME sector
	Unemployment reason - End of contract
	Unemployment reason - End of self-employment
	Unemployment reason - Entry into CSP contract after termination for economic reasons
	Unemployment reason - Initial labour market entry
	Unemployment reason - Other
	Unemployment reason - Return to work after more than 6 months
	Unemployment reason - Termination (Economic reasons)
	Unemployment reason - Termination (Other)
	Unemployment reason - Termination (Permanent contract by mutual agreement)
	Work type sought: Seasonal
	Work type sought: Temporary

C Conceptual framework

Set-up. We consider a stylized model of benefit take-up. An individual is eligible to an amount $b \geq 0$ of social benefits. Benefit application is an action $A \in \{0, 1\}$ equal to one if the benefits perceived with some error, $b + \varepsilon$, exceed application costs c and social stigma s:

$$A = \mathbb{I}\{b + \varepsilon - c - s > 0\}$$

Following Currie (2004), individuals eligible to a positive amount of social benefits $b > 0$ may not apply for three reasons. First, they may lack information and underestimate their eligibility: $\varepsilon < 0$ (Finkelstein and Notowidigdo, 2019). Second, they may face transaction costs c, which correspond to the non-monetary costs of going through the application process, e.g. due to its complexity and delays (Kleven and Kopczuk, 2011). Third, there may be a psychological cost s due to the stigma attached to claiming social benefit (Moffitt, 1983). In this paper, we evaluate the impact of different policy interventions that reduce the cost of application, provide information on benefit eligibility, and attenuate the stigma attached to benefit take-up.

Information. We first consider the effect of providing information to potential benefit claimants about their eligibility. This has an ambiguous effect on benefit application. To simplify the analysis of information provision, we drop the stigma s that is formally analog to application cost c. Each individual is characterized by the value of the cost c and the error ε they make in the perception of the benefits they are entitled to. We denote with $F(x) = P(b < x)$ the cumulative distribution function of benefits b given c and ε. The probability of applying to benefits is:

$$P(A = 1) = P(b > c - \varepsilon) = 1 - F(c - \varepsilon)$$

Providing full information on benefit eligibility has the following effect on take-up:

$$\Delta(c, \varepsilon) = P(b > c) - P(b > c - \varepsilon) = F(c - \varepsilon) - F(c)$$

The effect of the treatment is thus positive for agents who underestimate their eligibility ($\varepsilon < 0$) and negative otherwise. The population effect sums $\Delta(c, \varepsilon)$ over the joint distribution of (c, ε). Therefore, providing information increases take-up if, under imperfect information, there are more individuals who would benefit from ap-

plying but do not apply because they underestimate their eligibility than individuals whose net benefit is negative but who apply because they overestimate their eligibility. Given our empirical results, it is useful to consider the reasons for why providing information may have no or very small effects on applications. First, it could be that *on average* agents have accurate beliefs, even though many of them are wrong about their own eligibility. Second, it could be that the effect of erroneous beliefs is small as compared to that of transaction costs, such that for most people with $F(c-\varepsilon)=1$ (no take-up), we also have $F(c)=1$. Finally, it could simply be that ε is uniformly zero, i.e. that there are no information frictions.

To distinguish between these alternative explanations, we can look at the effect of information provision on the success rate of applications:

$$P(b>0|b>c)-P(b>0|b>c-\varepsilon)=1-P(b>0|b>c-\varepsilon)\geq 0$$

If many agents are wrong about their eligibility, even if they are right on average in the population, then the effect of providing information on the success rate of applications should be positive. This is because better information on eligibility improves self-selection into applying.

Application costs. We next investigate the impact of reducing application costs. We define c_0, as the application cost one faces when supported by a caseworker, i.e. when one receives treatment; on their own (untreated), agents face a larger cost $c\in[c_0,\infty[$ that is distributed in the population.[25] To simplify, we assume perfect information ($\varepsilon=0$). Then, the effect of this treatment for any agent of type c is:

$$\Delta(c)=P(b>c_0)-P(b>c)=F(c)-F(c_0)\geq 0$$

The population effect sums $\Delta(c)$ over the marginal distribution of c, and is positive. Note that in this case, the probability to apply and the probability to obtain a benefit are identical; the latter is more easily observable. The effect is stronger on agents that face higher transaction costs in the absence of treatment:

$$\frac{\partial\Delta(c)}{\partial c}=f(c)>0$$

[25] Again, given that stigma and costs enter in the same way in the decision to apply for benefits, the effect of reducing stigma can be discussed in the same terms.

To understand the effect of application costs on the targeting of benefits, we also consider the treatment effect on the benefit received by the average claimant:

$$\Delta^b(c) = E(b|b > c_0) - E(b|b > c) = \frac{\int_{c_0}^{\infty} bf(b)db}{1 - F(c_0)} - \frac{\int_{c}^{\infty} bf(b)db}{1 - F(c)}$$

For any agent of type c this quantity is negative if $c > c_0$ and zero otherwise. Integrating over c yields:

$$\Delta^b = \int_0^{\infty} \Delta^b(c)g(c)dc$$

If b and c are uncorrelated in the population, then Δ^b is negative: lowering application costs extends benefit eligibility to people with lower claims. This corresponds to the idea that application costs are ordeals mechanisms that improve targeting (Kleven and Kopczuk, 2011; Alatas et al., 2016). If b and c are sufficiently positively correlated however, i.e. if poorer people with higher claims also have higher costs, then Δ^b can be positive. In that case lowering application costs can attract poorer claimants (Deshpande and Li, 2019; Gupta, 2017).

D Letters

Figure D5: Neutral invitation to face-to-face meeting

pôle emploi

ALLOCATIONS FAMILIALES

Madame, Monsieur,

Vous étiez inscrit à Pôle Emploi au JJ MM AAAA. Vous avez peut-être droit à des prestations sociales et familiales dont vous ne bénéficiez pas encore.

Nous vous invitons à prendre contact, dès aujourd'hui, avec votre Caf en appelant le

<<Téléphone>>

Pour quoi faire ?

Bénéficier d'un rendez-vous personnalisé avec un professionnel de votre Caf pour étudier vos droits de manière détaillée.
Vous informer sur les prestations sociales et familiales auxquelles vous pouvez prétendre, mais dont vous ne bénéficiez peut-être pas encore.

Comment faire ?

Rien de plus simple.
En appelant le <<Téléphone>>, vous convenez d'un rendez-vous et obtenez immédiatement toutes les informations utiles pour vous y rendre.

Pour vous permettre d'accéder à l'ensemble de vos droits aux prestations familiales et sociales, appelez dès maintenant le **<<Téléphone>>** !

Nous sommes à votre service pour vous présenter les prestations sociales et familiales qui correspondent à votre situation. Vous êtes susceptible d'être contacté par un agent de la Caf à partir du numéro **<<Téléphone>>** pour vous donner toutes les informations utiles au déroulement du rendez-vous proposé.

Dans l'attente de votre appel, recevez, Madame, Monsieur, nos salutations respectueuses.

<<Prenom Nom>>
<<Fonction>>
<<Signature de Pôle Emploi>>

La proposition de rendez-vous personnalisé avec la Caf fait l'objet d'un traitement informatique de données à caractère personnel afin que la Caf dispose de la liste de personnes susceptibles de prendre ce rendez-vous. Conformément à la loi du 6 janvier 1978 modifiée, vous disposez d'un droit d'accès, de rectification et d'opposition pour des motifs légitimes, qui s'exerce par courrier électronique auprès du correspondant informatique et libertés à Pôle Emploi à l'adresse suivante: courriers-cnil-cada.00247@pole-emploi.fr

Figure D6: Invitation to face-to-face meeting with information

pôle emploi

ALLOCATIONS FAMILIALES

Madame, Monsieur,

Vous étiez inscrit à Pôle Emploi au JJ MM AAAA. Vous avez peut-être droit à des prestations sociales et familiales dont vous ne bénéficiez pas encore.

Nous vous invitons à prendre contact, dès aujourd'hui, avec votre Caf en appelant le

<<Téléphone>>

Pour quoi faire ?

Bénéficier d'un rendez-vous personnalisé avec un professionnel de votre Caf pour étudier vos droits de manière détaillée.
Vous informer sur les prestations sociales et familiales auxquelles vous pouvez prétendre, mais dont vous ne bénéficiez peut-être pas encore.

Comment faire ?

Rien de plus simple.
En appelant le <<Téléphone>>, vous convenez d'un rendez-vous et obtenez immédiatement toutes les informations utiles pour vous y rendre.

Pour vous permettre d'accéder à l'ensemble de vos droits aux prestations familiales et sociales, appelez dès maintenant le **<<Téléphone>>** !

Nous sommes à votre service pour vous présenter les prestations sociales et familiales qui correspondent à votre situation. Vous êtes susceptible d'être contacté par un agent de la Caf à partir du numéro **<<Téléphone>>** pour vous donner toutes les informations utiles au déroulement du rendez-vous proposé.

Au **dos de ce courrier,** découvrez quelques exemples de prestations susceptibles de vous concerner.

Dans l'attente de votre appel, recevez, Madame, Monsieur, nos salutations respectueuses.

<<Prenom Nom>>
<<Fonction>>
<<Signature de Pôle Emploi>>

... ➜

...

Connaissez-vous vos droits ?

Les prestations sociales et familiales qui peuvent s'appliquer à votre situation touchent tous les domaines de la vie : santé, famille, retraite, protection sociale, tarifs préférentiels d'accès à l'énergie, aides au logement...

Les situations présentées ci-dessous ne sont que des exemples.
Même si aucune d'elles ne correspond à votre situation personnelle, n'hésitez pas à appeler le **<<Téléphone>>** pour fixer un rendez-vous personnalisé avec un conseiller Caf.

"J'ai repris un emploi à temps partiel"

> Vous pouvez bénéficier de la Prime d'activité ou l'Allocation de Solidarité Spécifique (ASS), versées chaque mois.

"Je suis toujours à la recherche d'un emploi et je perçois peu ou pas d'allocations chômage"

> Vous pouvez peut-être bénéficier du revenu de solidarité active (Rsa) ou de l'Allocation de Solidarité Spécifique (ASS). Ces deux prestations vous garantissent un niveau minimum de revenu chaque mois.

"J'ai besoin de me soigner, mais j'hésite car je n'ai pas de complémentaire santé"

> Vous pouvez peut-être bénéficier de la Couverture Maladie Universelle Complémentaire (CMU-C) ou de l'Aide pour une Complémentaire Santé (ACS).

La CMU-C prend en charge une partie de vos dépenses de santé: consultations médicales, médicaments, soins à l'hôpital, lunettes ou prothèses auditives. Avec la CMU-C, vous n'avez pas à payer directement vos soins : ils sont réglés par la CMU-C.

L'ACS vous rembourse une partie de vos dépenses pour la souscription d'une complémentaire santé protégeant tous les membres de votre foyer. Comme avec la CMU-C, vous n'avez pas à payer directement vos soins.

IMPORTANT. Si vous bénéficiez de la CMU-C ou de l'ACS, vous bénéficiez de tarifs avantageux pour l'électricité et le gaz.

"Je viens d'entrer au chômage et j'ai des difficultés à payer mon loyer ou la mensualité de mon emprunt immobilier"

> Même si vous n'y aviez pas droit avant, vous avez peut-être désormais droit à l'allocation de logement familiale (Alf), l'allocation de logement social (Als) ou à l'aide personnalisée au logement (Apl). Ces allocations sont versées chaque mois.

La proposition de rendez-vous personnalisé avec la Caf fait l'objet d'un traitement informatique de données à caractère personnel afin que la Caf dispose de la liste de personnes susceptibles de prendre ce rendez-vous. Conformément à la loi du 6 janvier 1978 modifiée, vous disposez d'un droit d'accès, de rectification et d'opposition pour des motifs légitimes, qui s'exerce par courrier électronique auprès du correspondant informatique et libertés à Pôle Emploi à l'adresse suivante: courriers-cnil-cada.00247@pole-emploi.fr

Figure D7: Information flyer

Figure D8: Stigma reduction flyer

Les aides sociales sont un droit, elles sont là pour vous aider dans les moments difficiles

D'anciens bénéficiaires témoignent

Muriel,

Agent administratif, 52 ans

À la naissance de mon fils, j'ai choisi de mettre entre parenthèses ma vie professionnelle pour m'occuper de lui. Durant un temps, le père de celui-ci subvenait à nos besoins. Cependant, il y a quelques années, il n'a plus été en mesure de nous verser de l'argent. Je me suis retrouvée brutalement avec mon fils sans ressources et sans logement. J'ai donc entrepris plusieurs démarches dont une demande de RSA auprès de la Caf. Cette prestation m'a permis de faire face à une partie de mes difficultés financières et d'envisager plus sereinement la recherche d'un logement et d'un emploi. **Aujourd'hui, je suis en contrat dans l'administration et j'ai retrouvé un appartement.**

Olivier,

Ouvrier agricole, 45 ans

Ils ont rencontré des difficultés financières

Lorsque ma compagne est décédée il y a 2 ans, je me suis retrouvé un peu perdu face aux démarches administratives. Certaines de mes aides ont été suspendues. J'ai eu rendez-vous avec une assistante sociale de la Caf. Celle-ci m'a accompagné pour résoudre les problèmes liés à mon dossier. Son intervention m'a aidé pour solder ma dette locative et j'ai pu bénéficier de l'allocation logement et de l'allocation de soutien familial auxquelles j'avais droit. **Ces aides m'ont aidé à surmonter certaines des difficultés financières que j'ai pu rencontrer à cette période de ma vie.**

Les aides sociales leur ont permis de rebondir

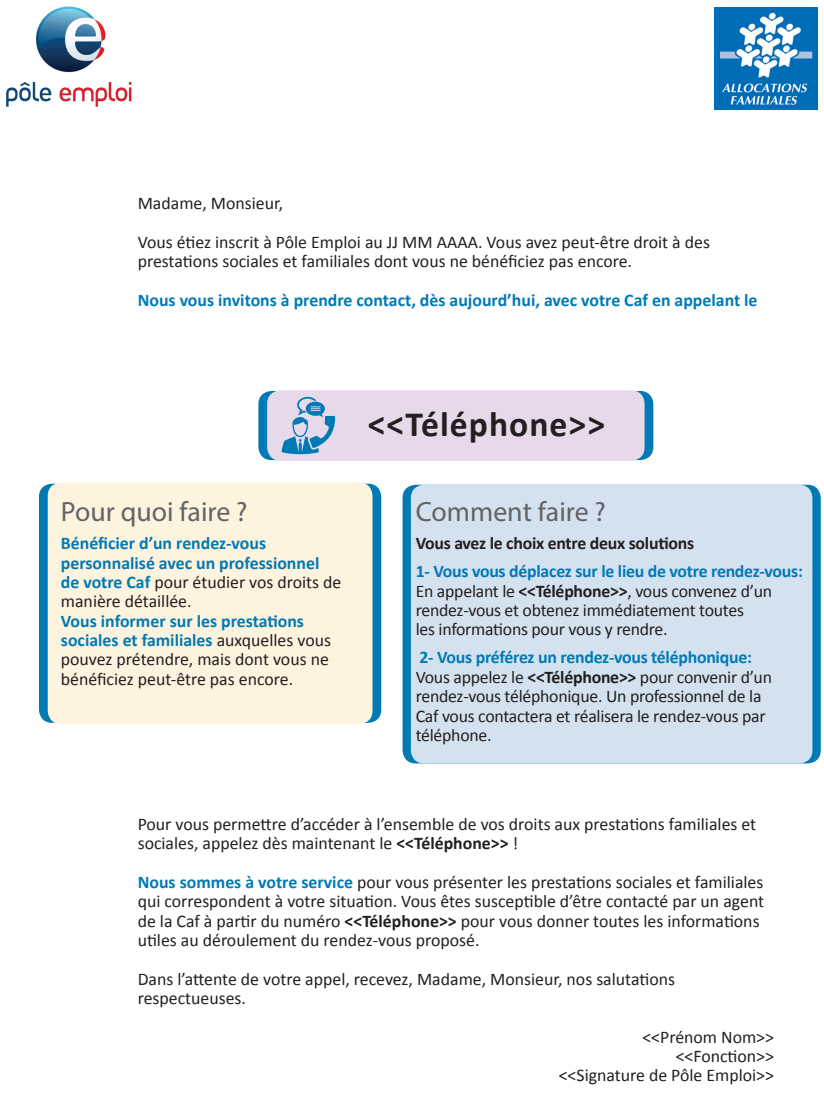
Martine,

Hôtesse administrative, 34 ans

Suite à une séparation et à des charges de loyer élevées, J'ai commencé à contracter une dette locative qui s'est aggravée pendant l'arrêt maladie que l'on m'a prescrit durant ma grossesse. J'ai cependant pu reprendre le travail après la naissance de mon fils grâce à la Caf qui m'a aidé à trouver un mode de garde pour lequel je pouvais bénéficier d'aides financières. J'ai aussi fini par trouver un appartement au loyer moins élevé et j'ai pu bénéficier d'un prêt par l'intermédiaire de la Caf pour le meubler. **Aujourd'hui, j'ai donc un emploi et un logement où je vis avec mon fils de 4 ans.**

Des aides existent pour la santé, le logement, l'éducation de vos enfants...

Figure D9: Neutral invitation to face-to-face or phone meeting



pôle emploi

ALLOCATIONS FAMILIALES

Madame, Monsieur,

Vous étiez inscrit à Pôle Emploi au JJ MM AAAA. Vous avez peut-être droit à des prestations sociales et familiales dont vous ne bénéficiez pas encore.

Nous vous invitons à prendre contact, dès aujourd'hui, avec votre Caf en appelant le

<<Téléphone>>

Pour quoi faire ?

Bénéficier d'un rendez-vous personnalisé avec un professionnel de votre Caf pour étudier vos droits de manière détaillée.
Vous informer sur les prestations sociales et familiales auxquelles vous pouvez prétendre, mais dont vous ne bénéficiez peut-être pas encore.

Comment faire ?

Vous avez le choix entre deux solutions

1- Vous vous déplacez sur le lieu de votre rendez-vous:
En appelant le **<<Téléphone>>**, vous convenez d'un rendez-vous et obtenez immédiatement toutes les informations pour vous y rendre.

2- Vous préférez un rendez-vous téléphonique:
Vous appelez le **<<Téléphone>>** pour convenir d'un rendez-vous téléphonique. Un professionnel de la Caf vous contactera et réalisera le rendez-vous par téléphone.

Pour vous permettre d'accéder à l'ensemble de vos droits aux prestations familiales et sociales, appelez dès maintenant le **<<Téléphone>>** !

Nous sommes à votre service pour vous présenter les prestations sociales et familiales qui correspondent à votre situation. Vous êtes susceptible d'être contacté par un agent de la Caf à partir du numéro **<<Téléphone>>** pour vous donner toutes les informations utiles au déroulement du rendez-vous proposé.

Dans l'attente de votre appel, recevez, Madame, Monsieur, nos salutations respectueuses.

<<Prénom Nom>>
<<Fonction>>
<<Signature de Pôle Emploi>>

La proposition de rendez-vous personnalisé avec la Caf fait l'objet d'un traitement informatique de données à caractère personnel afin que la Caf dispose de la liste de personnes susceptibles de prendre ce rendez-vous. Conformément à la loi du 6 janvier 1978 modifiée, vous disposez d'un droit d'accès, de rectification et d'opposition pour des motifs légitimes, qui s'exerce par courrier électronique auprès du correspondant informatique et libertés à Pôle Emploi à l'adresse suivante: courriers-cnil-cada.00247@pole-emploi.fr

E Targeting thresholds for unemployment benefits

In the targeting phase, we only keep individuals whose benefit amount is less than a threshold determined by the individual's marital status, number of children, and, where available, partner's earnings. There are two sets of thresholds. The first is used for all individuals. The second is used for individuals for whom we have information on the partner's earnings.

Table E22: Thresholds for all individuals

Marital status	**Number of children**	**Threshold (Euros per month)**
Not married	0	1220
Not married	1	1900
Not married	2	2260
Not married	3+	2760
Married	0	1500
Married	1	1900
Married	2	2260
Married	3+	2760

Table E23: Thresholds for individuals for whom data on partner's earnings is available

Marital status	Number of children	Partner income (Euros per month)	Threshold (Euros per month)
Married	0	$0 < 571 \leq$	890
Married	0	$571 < 685 \leq$	770
Married	0	$685 < 799 \leq$	650
Married	0	$799 < 913 \leq$	530
Married	0	$913 < 1027 \leq$	410
Married	0	$1027 < 1142 \leq$	290
Married	0	$1142 < 1256 \leq$	170
Married	0	$1256 < 1370 \leq$	50
Married	0	> 1370	0
Married	1	$0 < 571 \leq$	1300
Married	1	$571 < 685 \leq$	1180
Married	1	$685 < 799 \leq$	1060
Married	1	$799 < 913 \leq$	940
Married	1	$913 < 1027 \leq$	820
Married	1	$1027 < 1142 \leq$	700
Married	1	$1142 < 1256 \leq$	580
Married	1	$1256 < 1370 \leq$	460
Married	1	$1370 < 1484 \leq$	340
Married	1	$1484 < 1598 \leq$	220
Married	1	$1598 < 1712 \leq$	100
Married	1	> 1712	0
Married	2	$0 < 571 \leq$	1660
Married	2	$571 < 685 \leq$	1540
Married	2	$685 < 799 \leq$	1420
Married	2	$799 < 913 \leq$	1300
Married	2	$913 < 1027 \leq$	1180
Married	2	$1027 < 1142 \leq$	1060
Married	2	$1142 < 1256 \leq$	940
Married	2	$1256 < 1370 \leq$	820
Married	2	$1370 < 1484 \leq$	700
Married	2	$1484 < 1598 \leq$	580
Married	2	$1598 < 1712 \leq$	460
Married	2	$1712 < 1827 \leq$	340
Married	2	$1827 < 1941 \leq$	220
Married	2	$1941 < 2055 \leq$	100
Married	2	> 2055	0
Married	3+	$0 < 571 \leq$	2160
Married	3+	$571 < 685 \leq$	2050
Married	3+	$685 < 799 \leq$	1930
Married	3+	$799 < 913 \leq$	1810
Married	3+	$913 < 1027 \leq$	1590
Married	3+	$1027 < 1142 \leq$	1570
Married	3+	$1142 < 1256 \leq$	1450
Married	3+	$1256 < 1370 \leq$	1330
Married	3+	$1370 < 1484 \leq$	1210
Married	3+	$1484 < 1598 \leq$	1090
Married	3+	$1598 < 1712 \leq$	970
Married	3+	$1712 < 1827 \leq$	850
Married	3+	$1827 < 1941 \leq$	730
Married	3+	$1941 < 2055 \leq$	610
Married	3+	$2055 < 2169 \leq$	490
Married	3+	$2169 < 2283 \leq$	370
Married	3+	$2283 < 2397 \leq$	250
Married	3+	$2397 < 2512 \leq$	130
Married	3+	> 2512	0