Online Appendix for:

Evaluating Recent Crackdowns on Disability Benefits:
Effects on Income and Health Care Use in Australia

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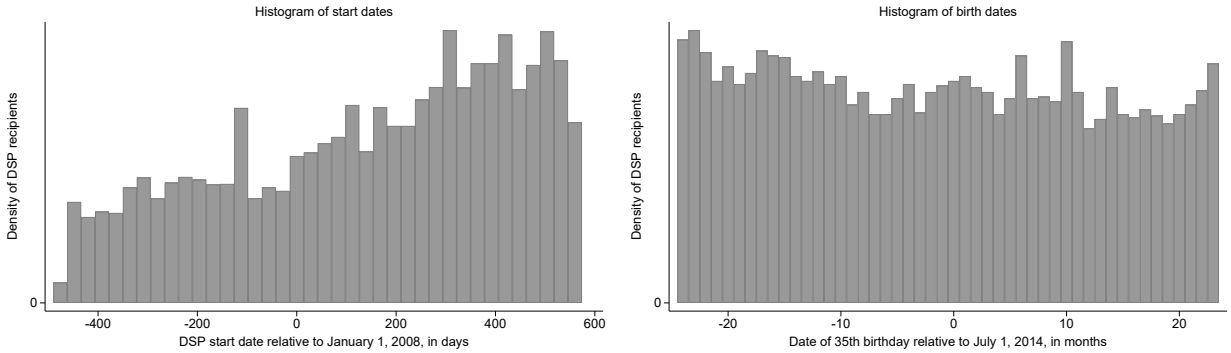
A Appendix Figures and Tables

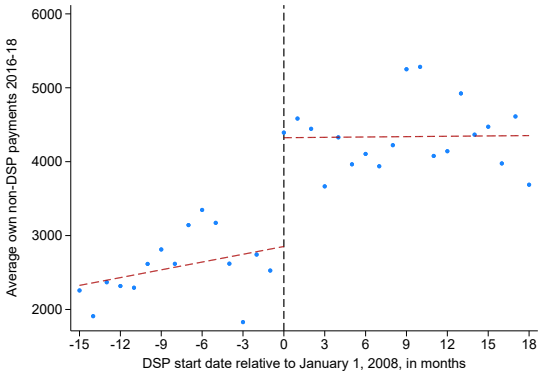
Appendix Figure A.1: Histogram of start dates and birth dates



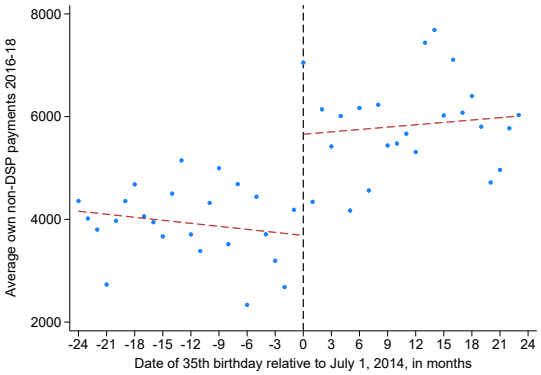
Notes: Left figure shows density of DSP spell starts around January 1, 2008. Sample is DSP recipients who entered DSP around the January 1, 2008, cutoff, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0 (or missing) hours of work capacity with intervention." Right figure shows density of DSP recipients with 35th birthdays around July 1, 2014. The sample consists of DSP recipients with a 35th birthday around July 1, 2014, who entered DSP after January 1, 2008, and before January 1, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0 (or missing) hours of work capacity with intervention."

Appendix Figure A.2: Start Date and Birth Date RD: Reduced form graphs

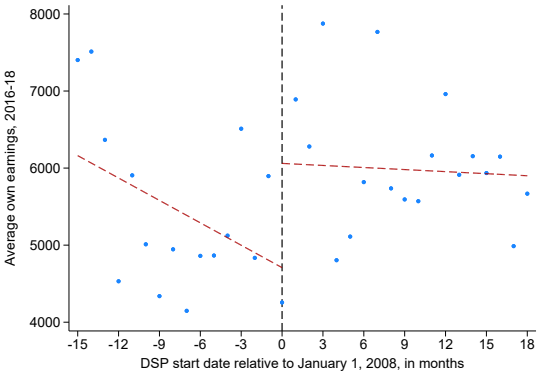
Start Date RD: Other govt payments



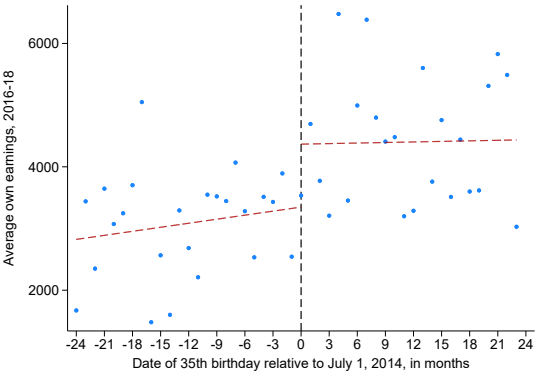
Birth Date RD: Other govt payments



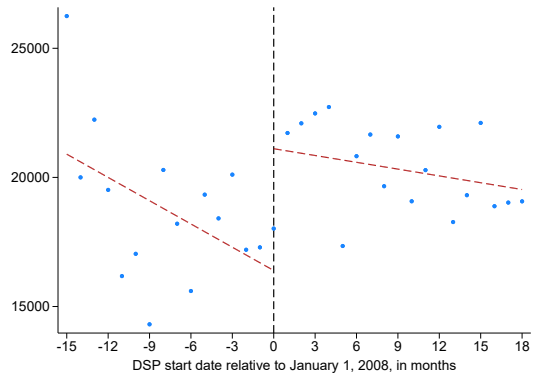
Start Date RD: Own earnings



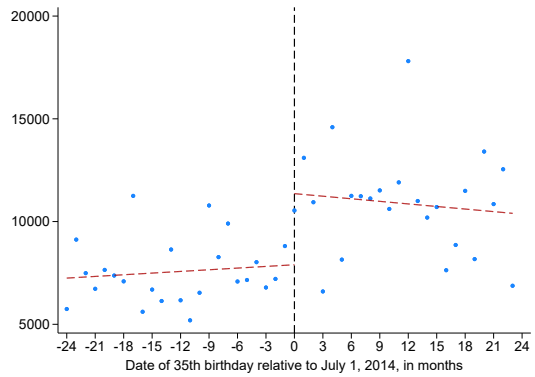
Birth Date RD: Own earnings



Start Date RD: Household earnings

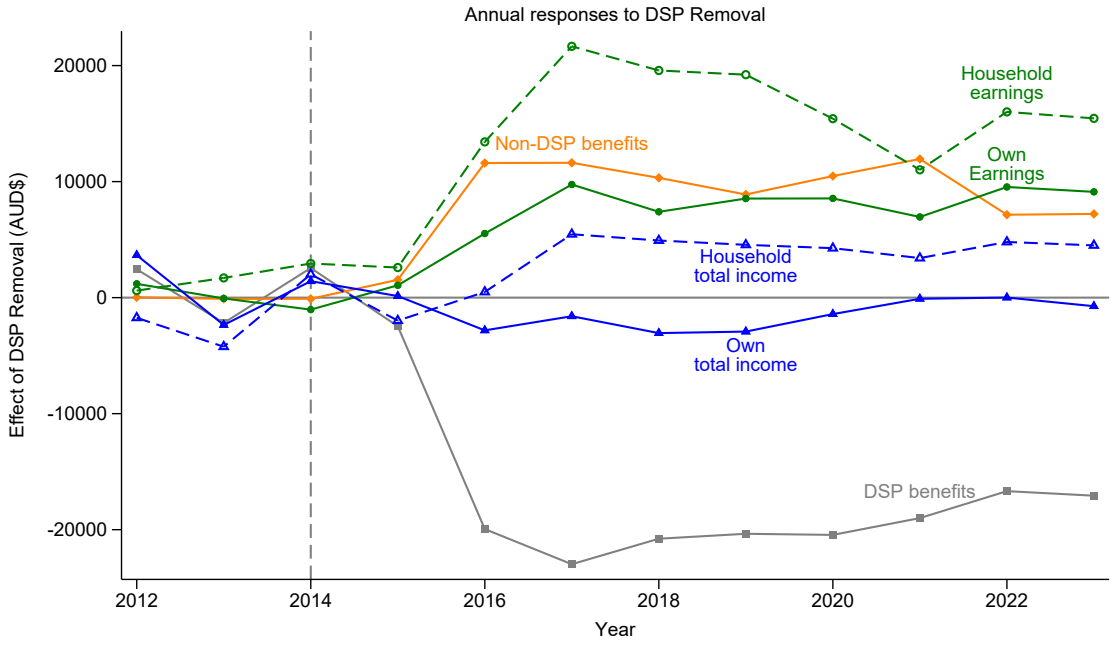


Birth Date RD: Household earnings



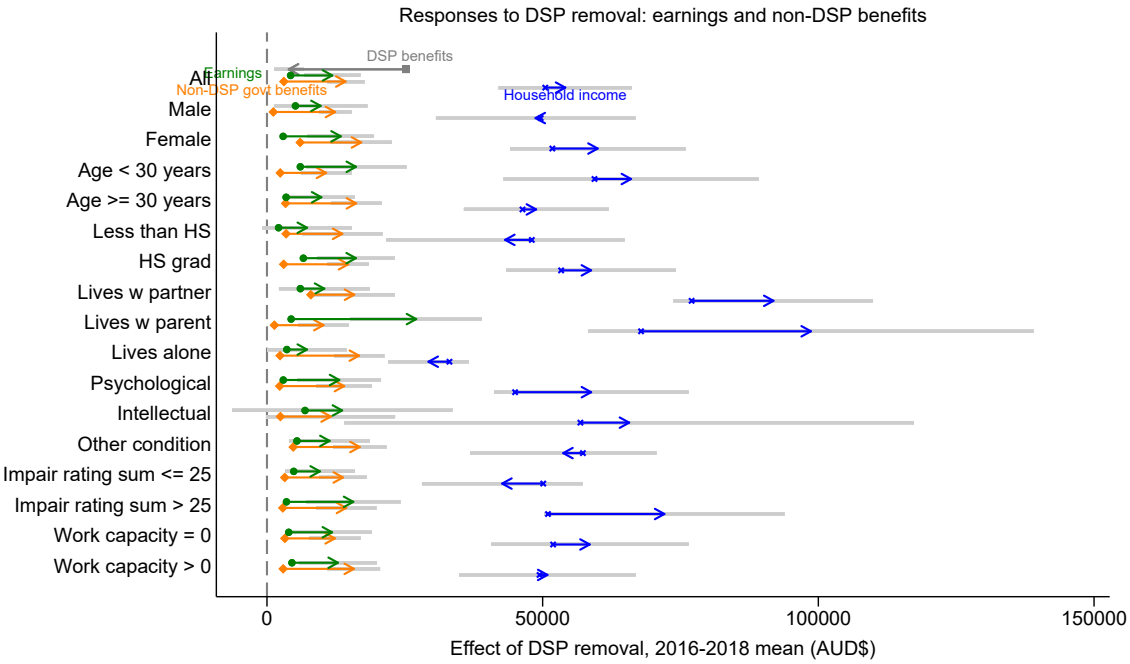
Notes: Top two figures show average annual non-DSP government payments from 2016 to 2018 for the Start Date RD (left) and Birth Date RD (right), respectively. Middle two figures show average annual own earnings between 2016 and 2018 for the Start Date RD (left) and Birth Date RD (right). Bottom two figures show average annual household earnings (own, spouse, and parent) between 2016 and 2018 for the Start Date RD (left) and Birth Date RD (right). Start Date sample is DSP recipients who entered DSP within 15 months before and 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Birth Date RD sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January 1, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating."

Appendix Figure A.3: Earnings and income responses to DSP removal highly persistent



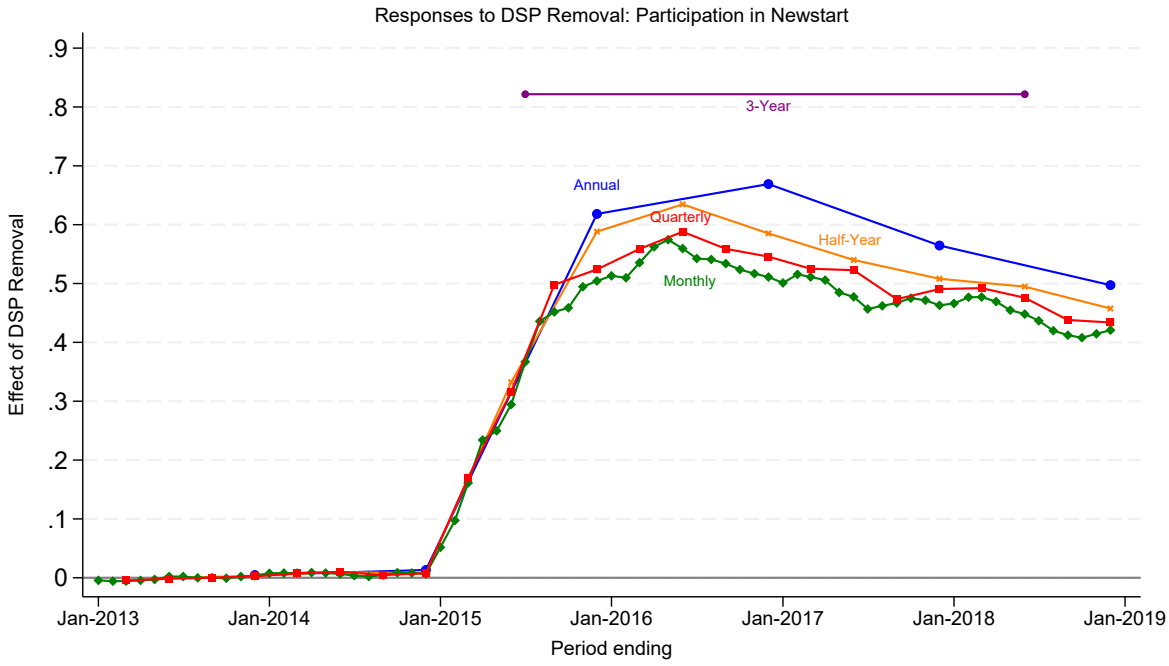
Notes: Figure plots IV estimates (i.e. β_5 from equation (5) including parent earnings controls) of the effect of DSP loss between 2014 and 2016 on annual earnings and income variables from 2012 to 2022 in 2024 Australian Dollars (AUD). "DSP benefits" represents the IV estimate of the effect of DSP loss on DSP benefits in each year. "Own earnings" represents the IV estimate of the effect of DSP loss on the DSP recipient's own earnings in each year. "Household earnings" represents the IV estimate of the effect on the sum of recipient, spouse, and parent earnings in each year. "Non-DSP benefits" represents the IV estimate of the effect of DSP loss on the DSP recipient's non-DSP benefits in each year. "Own total income" represents the IV estimate of the effect of DSP loss on the DSP recipient's government benefits (DSP and non-DSP) and earnings. "Household total income" represents the IV estimate of the effect of DSP loss on government benefits and earnings for the individual recipient, spouse, parents. Combined sample stacks the Start Date RD and Birth Date RD samples. Start Date sample is DSP recipients who entered DSP within 15 months before and 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Birth Date RD sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January 1, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." See Appendix Table A.8 for annual estimates.

Appendix Figure A.4: Responses to DSP removal: earnings and non-DSP benefits



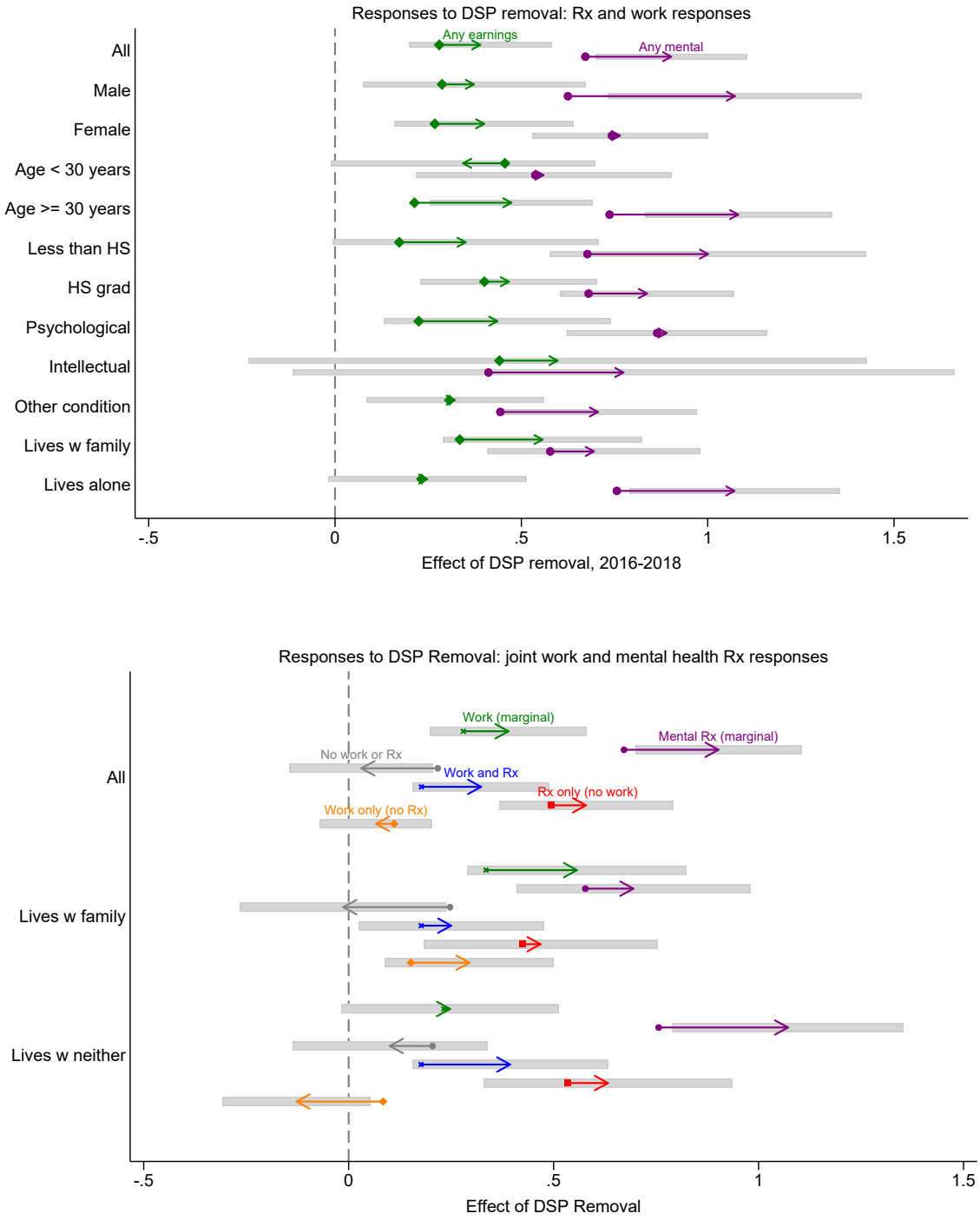
Notes: Figure plots IV estimates (i.e. β_5 of equation (5) including parent earnings controls) of the effect of DSP loss on average annual income measures (in 2024 AUD) by subgroup. The marker indicates the RD control mean, and the distance of the arrow represents the IV estimate from equation (5), so that the arrowhead represents the mean for those who are removed. Gray bars indicate 95% confidence intervals around the point estimate. "Earnings" are individual earnings from 2016-18, "Non-DSP benefits" individual non-DSP benefits from 2016-18, and "Household income" is the sum of own, spouse, and parent earnings and government (DSP and non-DSP) benefits from 2016-18. Combined sample stacks the Start Date RD and Birth Date RD samples. Start Date sample is DSP recipients who entered DSP within 15 months before and 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Birth Date RD sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January 1, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." See Appendix Table A.5 for point estimates.

Appendix Figure A.5: Not much "churn" on and off Newstart within a year



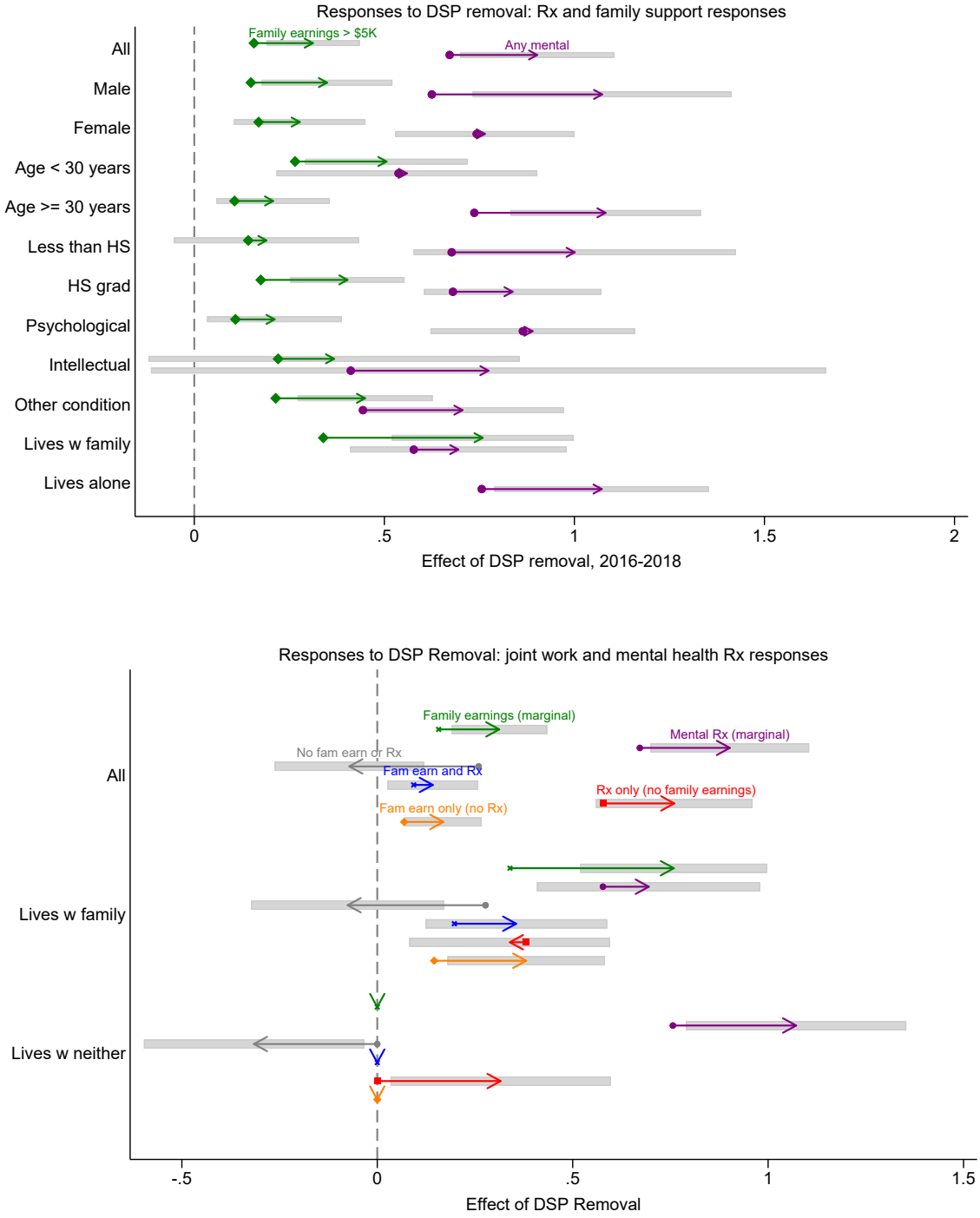
Notes: Figure plots IV estimates (i.e. β_5 of equation (5) including parent earnings controls) of the effect of DSP loss on the likelihood of receiving Newstart in a given time frame. Start Date sample is DSP recipients who entered DSP within 15 months before and 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Birth Date RD sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January 1, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating."

Appendix Figure A.6: Correlation between increase in work and increase in mental health Rx across subgroups



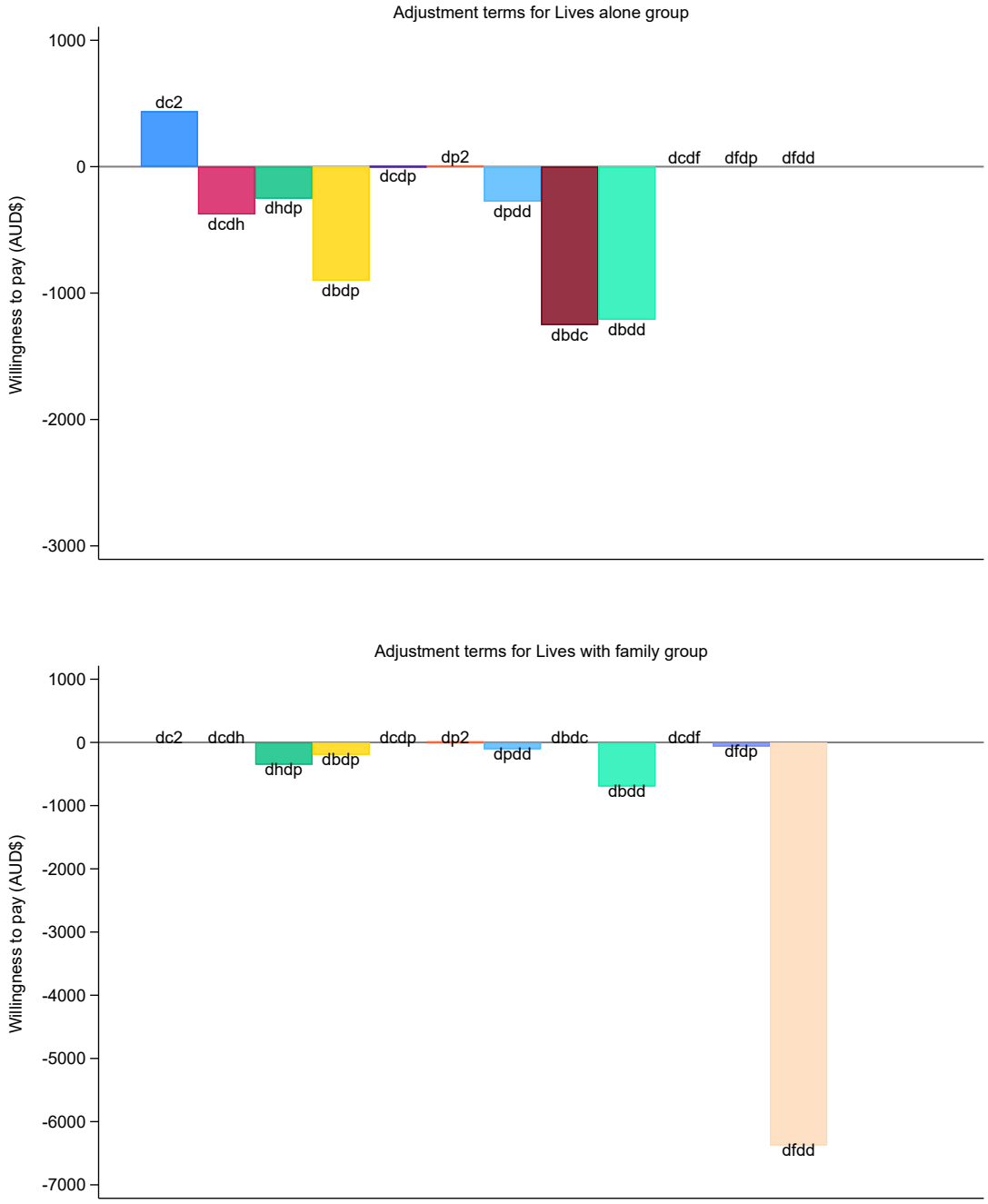
Notes: Top graph plots IV estimates (i.e. β_5 from equation (5) including parent earnings controls) of the effect of DSP loss on the likelihood of having any earnings between 2016–18 and the likelihood of having a mental health drug prescription by subgroup. See Appendix Table A.5 for point estimates for any earnings and Appendix Table A.15 for point estimates for any mental health drug. Bottom graph plots, by subgroup, IV estimates (i.e. β_5 of equation (5) including parent earnings controls) of the effect of DSP loss on the joint likelihood of working and having a mental health drug prescription from 2016-18. The outcomes are divided into four mutually exclusive and collectively exhaustive categories: neither work nor mental health prescription, both work and mental health prescription, work only (no mental health prescription), and mental health prescription only (no work). The marker indicates the RD control mean, and the distance of the arrow represents the IV estimate from equation (5), so that the arrowhead represents the mean for those who are removed. Gray bars indicate 95% confidence intervals around the point estimate. See Appendix Table A.18 for point estimates and Appendix Table A.13 for correlation coefficients between point estimates of any mental and any earnings (at different earnings thresholds) across subgroups.

Appendix Figure A.7: Correlation between increase in family (parents/spouse) support and increase in mental health Rx across subgroups



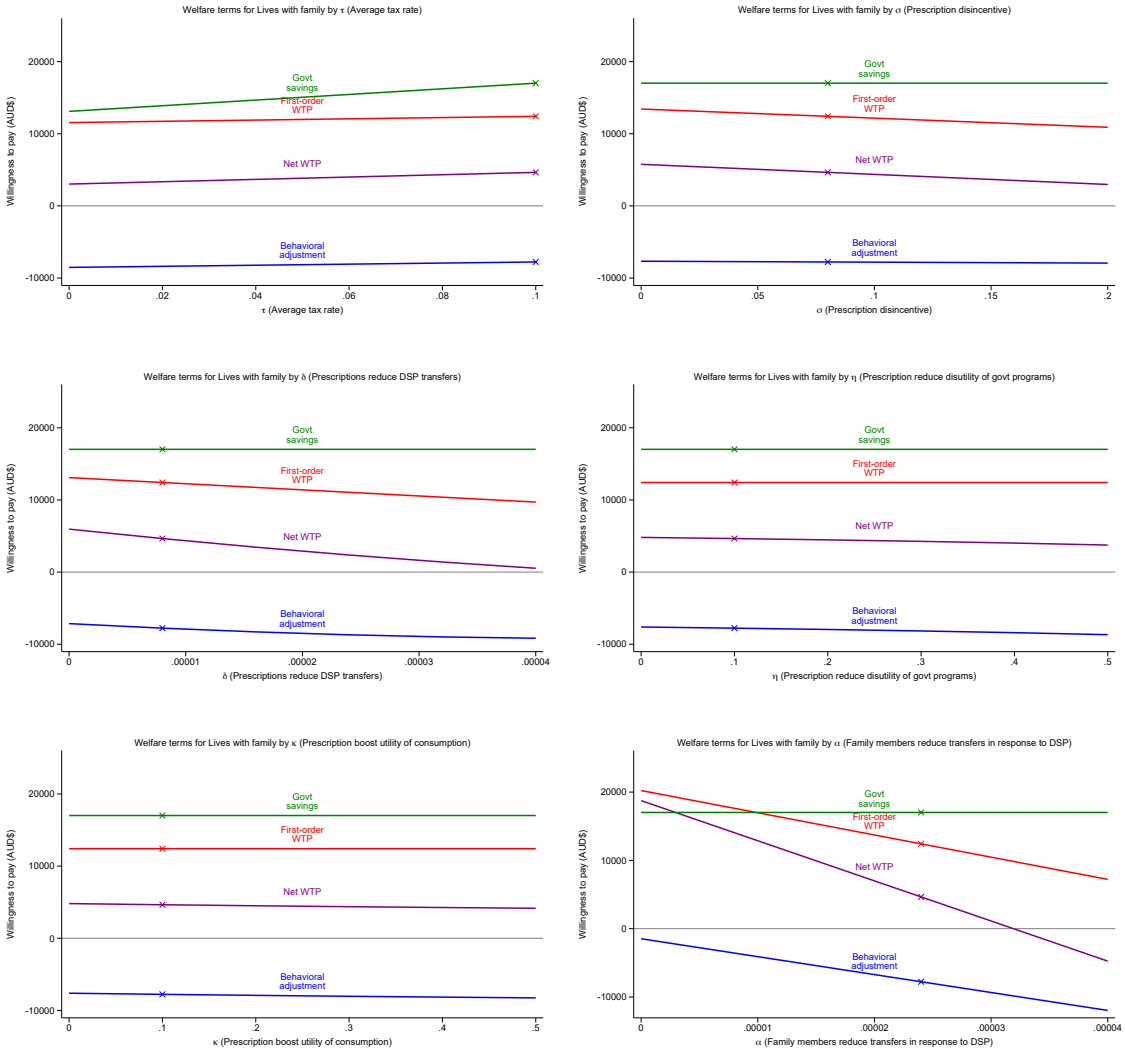
Notes: Top graph plots IV estimates (i.e. β_5 from equation (5) including parent earnings controls) of the effect of DSP loss on the likelihood of family members (parents/spouse) earning more than $5,000 per year between 2016–18 and the likelihood of having a mental health drug prescription by subgroup. See Appendix Table A.5 for point estimates for any earnings and Appendix Table A.15 for point estimates for any mental health drug. Bottom graph plots, by subgroup, IV estimates (i.e. β_5 of equation (5) including parent earnings controls) of the effect of DSP loss on the joint likelihood of family member earnings greater than $5,000 and having a mental health drug prescription from 2016-18. The outcomes are divided into four mutually exclusive and collectively exhaustive categories: neither family earnings nor mental health prescription, both family earnings and mental health prescription, family earnings only (no mental health prescription), and mental health prescription only (no family earnings). The marker indicates the RD control mean, and the distance of the arrow represents the IV estimate from equation (5), so that the arrowhead represents the mean for those who are removed. Gray bars indicate 95% confidence intervals around the point estimate. See Appendix Table A.18 for point estimates and Appendix Table A.13 for correlation coefficients between point estimates of any antipsychotic and any earnings (at different earnings thresholds) across subgroups.

Appendix Figure A.8: Behavioral adjustment terms for those who live alone vs with family



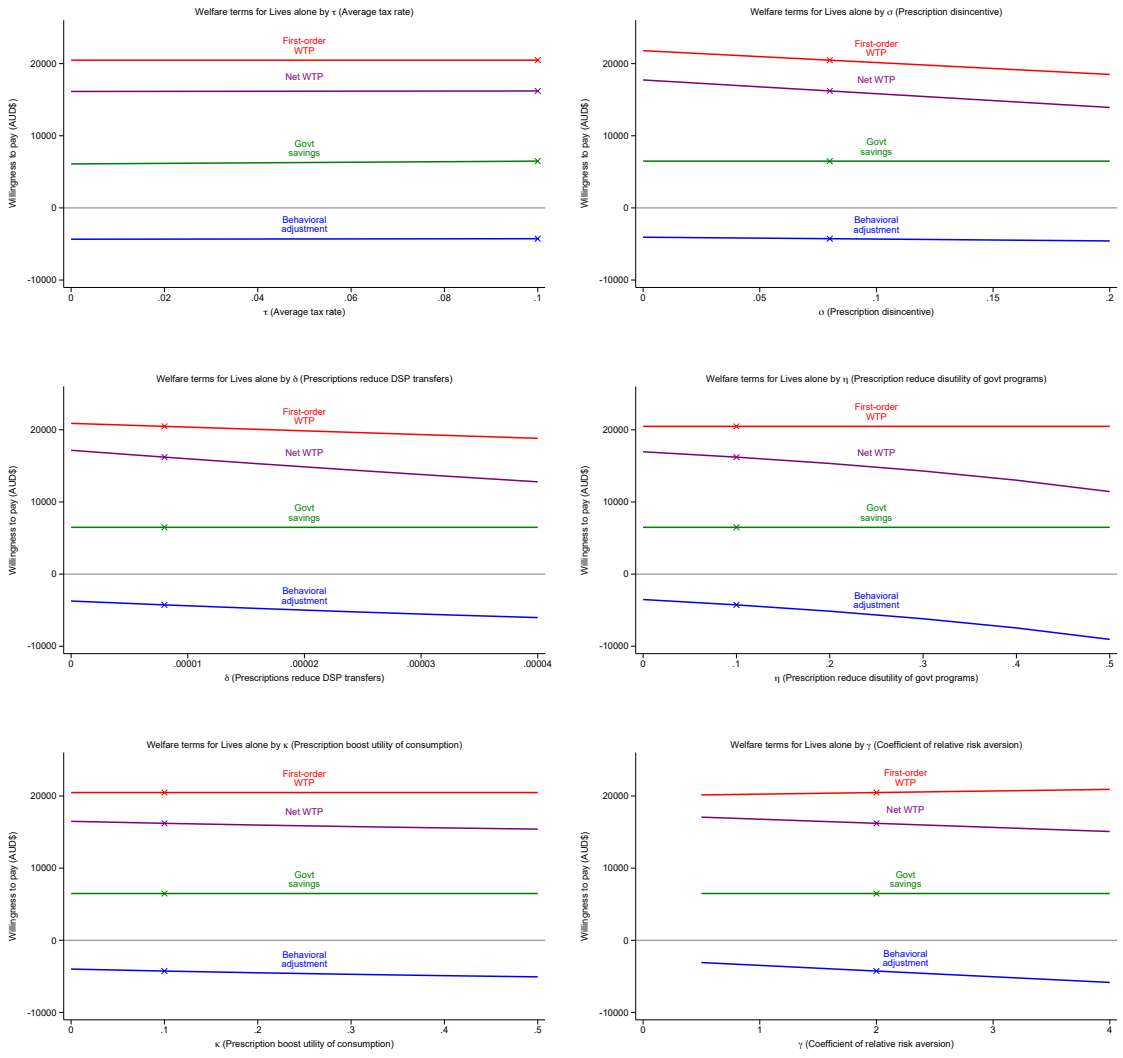
Notes: Figure shows each behavioral adjustment term from equation (25) for those who live with family and those who live alone. For those who live with family, we set $\frac{dc}{dD} = 0$ since the empirical value is negative. For those who live alone, we set $\frac{dc}{dD}$ to its empirical value and $\frac{df}{dD} = 0$.

Appendix Figure A.9: Lives with family: welfare terms sensitive to family member adjustment



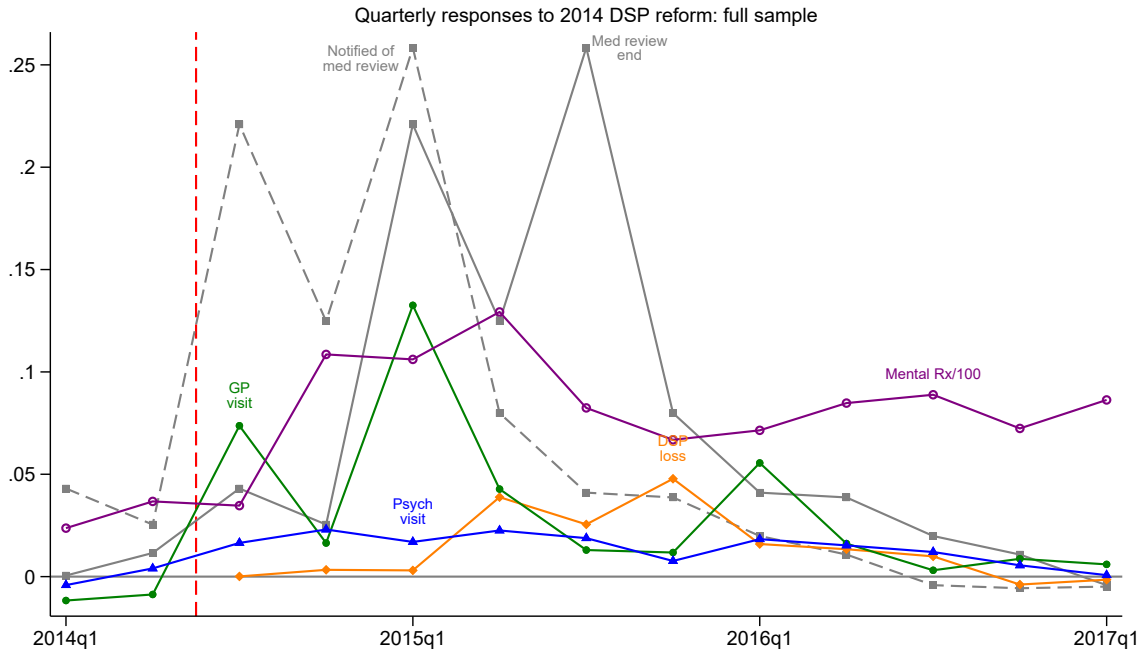
Notes: Figure shows first-order loss, second-order adjustment, and net welfare loss under different parameter values. Markers indicate the parameter value that we use in Figure 8. See Section 5.1 for more details on each parameters.

Appendix Figure A.10: Lives alone: welfare terms sensitive to stress effect of other programs (η)



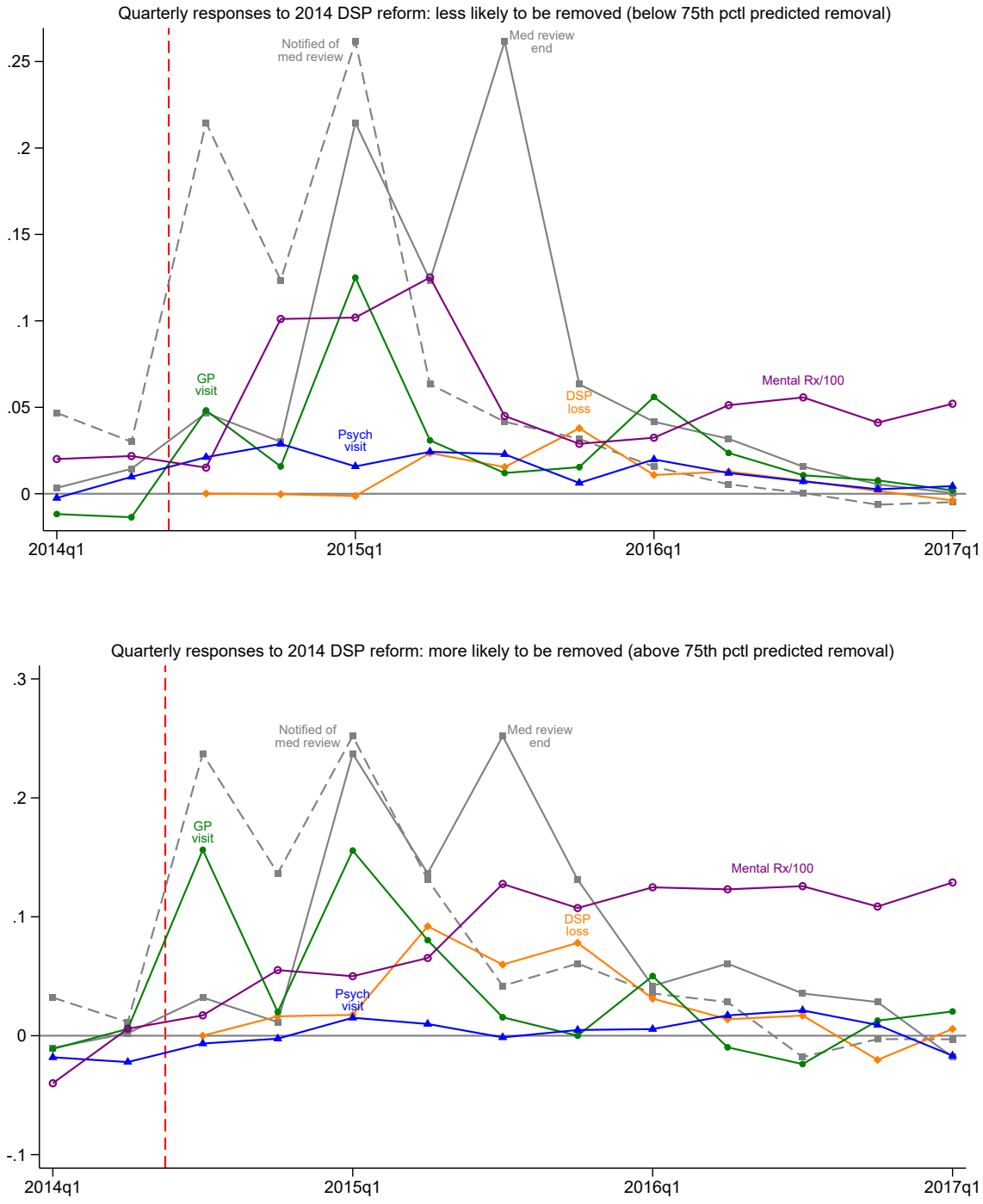
Notes: Figure shows first-order loss, second-order adjustment, and net welfare loss under different parameter values. Markers indicate the parameter values that we use in Figure 8. See Section 5.1 for more details on each parameters.

Appendix Figure A.11: Timing of key outcomes



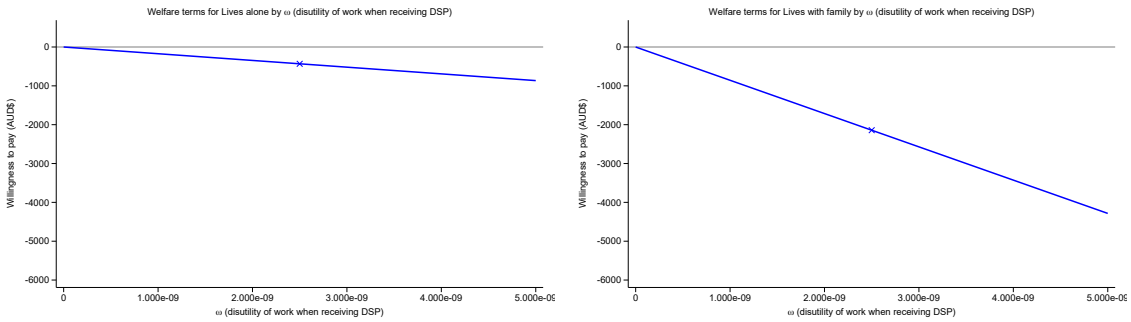
Notes: Graph plots β_4 from equation (4) (i.e. the RD estimate of the effect of the cutoff) on various quarterly outcomes. We stack the Start Date RD and Birth Date RD sample, and plot the coefficient on being above the cutoff. "Med review end" indicates when the medical review ended. "Notified of med review" indicates our best guess of when the DSP recipient was notified of a medical review; the line is dashed because we do not directly observe this outcome in the data (it is the "Med review end" series shifted back two quarters). "DSP loss" indicates date of losing DSP benefits. "GP visit" indicates primary care/general practitioner visit. "Psych visit" indicates a psychiatric visit. "Mental Rx/100" is spending on mental prescriptions in 2024 AUD divided by 100 AUD to fit the graph scale.

Appendix Figure A.12: Persistent increase in mental health prescriptions only for those with high DSP loss rates



Notes: Top (bottom) graph plots β_4 from equation (4) (i.e. the RD estimate of the effect of the cutoff) on various quarterly outcomes for DSP recipients below (above) the 75th percentile of predicted removal probability. "Med review end" indicates when the medical review ended. "Notified of med review" indicates our best guess of when the DSP recipient was notified of a medical review; the line is dashed because we do not directly observe this outcome in the data (it is the "Med review end" series shifted back two quarters). "DSP loss" indicates date of losing DSP benefits. "GP visit" indicates primary care/general practitioner visit. "Psych visit" indicates a psychiatric visit. "Mental Rx/100" is spending on mental prescriptions in 2024 AUD divided by 100AUD to fit the graph scale.

Appendix Figure A.13: Adjustment term from state-dependent utility model is sensitive to choice of ω



Notes: Left (right) figure shows how the adjustment term from equation (36) changes with ω for those that live alone (live with family). Marker indicates parameter value assumed in baseline calculations.

Appendix Table A.1: Summary statistics

	Full DSP Population		Under 40		Start Date RD		Birth Date RD		Combined RDs		
Variable	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N	Compliers
Male (D)	0.531	828,354	0.587	193,342	0.595	10,665	0.583	6,521	0.590	17,186	0.563
Female (D)	0.469	828,354	0.413	193,342	0.405	10,665	0.417	6,521	0.410	17,186	0.437
Education (D): Less than HS	0.450	270,374	0.438	120,959	0.452	9,146	0.399	5,369	0.432	14,515	0.285
Education (D): HS grad	0.506	270,374	0.501	120,959	0.498	9,146	0.542	5,369	0.514	14,515	0.696
Education (D): Missing	0.683	828,354	0.402	193,342	0.162	10,665	0.200	6,521	0.176	17,186	0.093
Education (C): Less than HS	0.593	527,013	0.540	114,627	0.467	6,832	0.468	3,834	0.467	10,666	0.499
Education (C): HS grad	0.407	527,013	0.460	114,627	0.533	6,832	0.532	3,834	0.533	10,666	0.501
Education (C): Missing	0.364	828,354	0.407	193,342	0.359	10,665	0.412	6,521	0.379	17,186	0.366
Education (D,C): Less than HS	0.558	626,049	0.489	161,517	0.458	10,112	0.424	6,026	0.446	16,138	0.304
Education (D,C): HS grad	0.436	626,049	0.498	161,517	0.517	10,112	0.549	6,026	0.529	16,138	0.677
Education (D,C): Missing	0.244	828,354	0.165	193,342	0.052	10,665	0.076	6,521	0.061	17,186	0.028
Parent eduction: less than high school	0.551	108,055	0.550	107,519	0.521	6,784	0.605	2,810	0.546	9,594	0.558
Parent eduction: high school or more	0.449	108,055	0.450	107,519	0.479	6,784	0.395	2,810	0.454	9,594	0.442
Parent eduction: missing	0.870	828,354	0.444	193,342	0.364	10,665	0.569	6,521	0.442	17,186	0.387
Has spouse in Domino as of Jul 2014(D)	0.280	828,354	0.120	193,342	0.121	10,665	0.189	6,521	0.147	17,186	0.198
No spouse in Domino as of Jul 2014(D)	0.720	828,354	0.880	193,342	0.879	10,665	0.811	6,521	0.853	17,186	0.802
Married (C)	0.323	600,868	0.132	131,657	0.115	7,343	0.242	4,204	0.162	11,547	0.213
Not married (C)	0.593	600,868	0.752	131,657	0.806	7,343	0.671	4,204	0.757	11,547	0.711
Has child in 2014 (D)	0.389	828,354	0.208	193,342	0.195	10,665	0.404	6,521	0.274	17,186	0.352
No child in 2014 (D)	0.611	828,354	0.792	193,342	0.805	10,665	0.596	6,521	0.726	17,186	0.648
Parent listed in DOMINO as of Jul 2014 (D)	0.192	828,354	0.819	193,342	0.917	10,665	0.685	6,521	0.829	17,186	0.887
No parent list in DOMINO as of Jul 2014 (D)	0.808	828,354	0.181	193,342	0.083	10,665	0.315	6,521	0.171	17,186	0.113
Live with Parent Jul 2014(D): yes	0.437	159,130	0.436	158,294	0.407	9,779	0.233	4,464	0.352	14,243	0.280
Live with Parent Jul 2014(D): no	0.563	159,130	0.564	158,294	0.593	9,779	0.767	4,464	0.648	14,243	0.720
Lives with Parent or have Spouse (D)	0.362	828,354	0.468	193,342	0.483	10,665	0.338	6,521	0.428	17,186	0.435
Does not live with Parent or have Spouse (D)	0.638	828,354	0.532	193,342	0.517	10,665	0.662	6,521	0.572	17,186	0.565
Demo (D): Male & live with family	0.194	828,354	0.274	193,342	0.287	10,665	0.197	6,521	0.253	17,186	0.246
Demo (D): Female & live with family	0.168	828,354	0.194	193,342	0.196	10,665	0.140	6,521	0.175	17,186	0.189
Demo (D): Male & live alone	0.337	828,354	0.313	193,342	0.308	10,665	0.385	6,521	0.337	17,186	0.317
Demo (D): Female & live alone	0.301	828,354	0.219	193,342	0.209	10,665	0.277	6,521	0.235	17,186	0.248
Age (D): 29 and below	0.115	828,354	0.492	193,342	0.703	10,665	-	6,521	0.436	17,186	0.510
Age (D): 30 and above	0.885	828,354	0.508	193,342	0.297	10,665	-	6,521	0.564	17,186	0.490
DSP start age (D): 17	0.113	828,354	0.339	193,342	0.261	10,665	-	6,521	0.162	17,186	0.125
DSP start age (D): 18-20	0.049	828,354	0.169	193,342	0.225	10,665	-	6,521	0.140	17,186	0.161
DSP start age (D): 21-25	0.057	828,354	0.171	193,342	0.275	10,665	-	6,521	0.171	17,186	0.240
DSP start age (D): 26-30	0.064	828,354	0.150	193,342	0.239	10,665	0.306	6,521	0.264	17,186	0.421
DSP start age (D): 31-35	0.081	828,354	0.123	193,342	-	10,665	0.694	6,521	0.264	17,186	0.053
Matches to Census (C)	0.275	828,354	0.319	193,342	0.311	10,665	0.355	6,521	0.328	17,186	0.325
Labor force (C): employed in 2011	0.152	600,868	0.190	131,657	0.182	7,343	0.120	4,204	0.160	11,547	0.140
Labor force (C): not in labor force in 2011	0.768	600,868	0.672	131,657	0.691	7,343	0.778	4,204	0.723	11,547	0.696
Labor force (C): unemployed in 2011	0.040	600,868	0.075	131,657	0.099	7,343	0.068	4,204	0.088	11,547	0.131
Ethnicity (C): European	0.602	600,868	0.551	131,657	0.572	7,343	0.580	4,204	0.575	11,547	0.601
Ethnicity (C): Oceanic	0.254	600,868	0.321	131,657	0.316	7,343	0.273	4,204	0.300	11,547	0.274
Ethnicity (C): other	0.144	600,868	0.128	131,657	0.112	7,343	0.147	4,204	0.125	11,547	0.125
Aboriginal (C)	0.049	600,868	0.066	131,657	0.071	7,343	0.066	4,204	0.069	11,547	0.071
Family structure (C): 1 parent	0.189	600,748	0.254	131,634	0.262	7,343	0.230	4,204	0.251	11,547	0.281
Family structure (C): 2 parents	0.263	600,748	0.411	131,634	0.388	7,343	0.332	4,204	0.368	11,547	0.338
Family structure (C): couple, no kids	0.163	600,748	0.049	131,634	0.055	7,343	0.057	4,204	0.056	11,547	0.079
Family structure (C): single	0.368	600,748	0.266	131,634	0.267	7,343	0.360	4,204	0.301	11,547	0.273
Condition (M): intellectual	0.099	571,066	0.302	152,540	0.229	10,665	0.047	6,521	0.160	17,186	0.114
Condition (M): missing	0.311	828,354	0.211	193,342	-	10,665	-	6,521	-	17,186	-
Condition (M): musculoskeletal	0.268	571,066	0.065	152,540	0.062	10,665	0.134	6,521	0.089	17,186	0.144
Condition (M): other	0.256	571,066	0.157	152,540	0.173	10,665	0.175	6,521	0.174	17,186	0.218
Condition (M): psychological	0.329	571,066	0.427	152,540	0.490	10,665	0.600	6,521	0.532	17,186	0.475
Max impairment rating (M): ≥20	0.922	516,490	0.972	124,436	0.950	10,665	0.952	6,521	0.951	17,186	0.930
Max impairment rating (M): <20	0.078	516,490	0.028	124,436	0.050	10,665	0.048	6,521	0.049	17,186	0.070
Sum impairment rating (M): <25	0.538	516,490	0.562	124,436	0.548	10,665	0.649	6,521	0.586	17,186	0.665
Sum impairment rating (M): ≥25	0.462	516,490	0.438	124,436	0.452	10,665	0.351	6,521	0.414	17,186	0.335
Sum impairment rating (M): missing	0.376	828,354	0.356	193,342	-	10,665	-	6,521	-	17,186	-
Work capacity without int (M): 0 hours	0.623	393,314	0.607	100,438	0.437	10,665	0.458	6,521	0.445	17,186	0.443
Work capacity without int (M): 8 hours	0.358	393,314	0.373	100,438	0.553	10,665	0.528	6,521	0.544	17,186	0.552
Work capacity with int (M): 0 hours	0.381	391,732	0.303	100,090	-	10,665	-	6,521	-	17,186	-
Work capacity with int (M): 8 hours	0.582	391,732	0.663	100,090	0.980	10,665	0.967	6,521	0.975	17,186	0.984
Work capacity without int (M): =0	0.623	393,314	0.607	100,438	0.437	10,665	0.458	6,521	0.445	17,186	0.443
Work capacity without int (M): >0	0.377	393,314	0.393	100,438	0.563	10,665	0.542	6,521	0.555	17,186	0.557
Work capacity without int (M): missing	0.525	828,354	0.481	193,342	-	10,665	-	6,521	-	17,186	-
Work capacity with int (M): =0	0.381	391,732	0.303	100,090	-	10,665	-	6,521	-	17,186	-
Work capacity with int (M): >0	0.619	391,732	0.697	100,090	-	10,665	-	6,521	-	17,186	-
Work capacity without (M): missing	0.527	828,354	0.482	193,342	-	10,665	-	6,521	-	17,186	-
Labor force (T): pre-reform earn = 0	0.848	828,354	0.772	193,342	0.747	10,665	0.837	6,521	0.781	17,186	0.758
Labor force (T): pre-reform earn >0	0.152	828,354	0.228	193,342	0.253	10,665	0.163	6,521	0.219	17,186	0.242
Labor force (T): pre-DSP earn = 0	0.831	828,354	0.836	193,342	0.603	10,665	0.518	6,521	0.571	17,186	0.503
Labor force (T): pre-DSP earn >0	0.169	828,354	0.164	193,342	0.397	10,665	0.482	6,521	0.429	17,186	0.497
State (D): NSW	0.328	818,799	0.314	192,072	0.292	10,607	0.321	6,479	0.303	17,086	0.274
State (D): QLD	0.202	818,799	0.212	192,072	0.232	10,607	0.200	6,479	0.220	17,086	0.237
State (D): SA	0.090	818,799	0.083	192,072	0.092	10,607	0.082	6,479	0.088	17,086	0.078
State (D): VIC	0.247	818,799	0.256	192,072	0.249	10,607	0.256	6,479	0.252	17,086	0.253
State (D): WA	0.076	818,799	0.075	192,072	0.081	10,607	0.072	6,479	0.077	17,086	0.098
Medical spending 2013 (MB): >median	0.500	819,145	0.360	188,030	0.342	10,455	0.464	6,299	0.388	16,754	0.325
Medical spending 2013 (MB): <median	0.500	819,145	0.640	188,030	0.658	10,455	0.536	6,299	0.612	16,754	0.675
Prescription spending 2013 (P): >median	0.500	819,145	0.336	188,030	0.320	10,455	0.458	6,299	0.372	16,754	0.249
Prescription spending 2013 (P): <median	0.500	819,145	0.664	188,030	0.680	10,455	0.542	6,299	0.628	16,754	0.751
Doesn't live with parents	0.916	828,354	0.643	193,342	0.627	10,665	0.841	6,521	0.708	17,186	0.751
Live with parents & they have 0 earnings between 2012-14	0.040	828,354	0.171	193,342	0.160	10,665	0.094	6,521	0.135	17,186	0.104
Live with parents & they have on average less than 35k earnings 2012-14	0.018	828,354	0.076	193,342	0.082	10,665	0.033	6,521	0.063	17,186	0.060
Live with parents & they have on average more than 35k earnings 2012-14	0.026	828,354	0.111	193,342	0.131	10,665	0.032	6,521	0.093	17,186	0.084

Notes: Table presents summary statistics for several samples. The "Full DSP Population" is all DSP recipients as of July 1, 2014. The "Under 40" sample is all DSP recipients under the age 40 years as of July 1, 2014. The "Start Date RD" sample consists of individuals who entered DSP within 15 months before or 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." The "Birth Date RD" sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January 1, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." The "Combined RDs" sample stacks the Start Date and Birth Date samples. Letters in parentheses indicate the source of the covariates: DOMINO (D), 2011 Census (C), medical review file (M), prescription benefits (PB), Medicare benefits (MB), or Australian Tax Office data (T). See text for details on parent and spouse linkages.

Appendix Table A.2: Covariate balance tests

	Start					Birth				
Variable	Pt Est	Std Err	Cntrl Mean	% of mean	N	Pt Est	Std Err	Cntrl Mean	% of mean	N
Male (D)	0.009	0.021	0.595	1.50%	10,665	−0.015	0.025	0.615	−2.46%	6,521
Female (D)	−0.009	0.021	0.405	−2.20%	10,665	0.015	0.025	0.385	3.93%	6,521
Education (D): Less than HS	0.008	0.023	0.444	1.74%	9,146	−0.069	0.027	0.426	−16.12%	5,369
Education (D): HS grad	−0.012	0.023	0.490	−2.48%	9,146	0.040	0.027	0.511	7.88%	5,369
Education (D): Missing	−0.033	0.016	0.241	−13.50%	10,665	−0.005	0.019	0.200	−2.30%	6,521
Education (C): Less than HS	0.006	0.027	0.406	1.59%	6,832	0.038	0.033	0.507	7.43%	3,834
Education (C): HS grad	−0.006	0.027	0.594	−1.09%	6,832	−0.038	0.033	0.493	−7.63%	3,834
Education (C): Missing	0.017	0.021	0.344	5.09%	10,665	0.003	0.025	0.444	0.73%	6,521
Education (D,C): Less than HS	0.013	0.022	0.458	2.94%	10,112	−0.038	0.026	0.466	−8.18%	6,026
Education (D,C): HS grad	−0.015	0.022	0.514	−2.93%	10,112	0.029	0.026	0.506	5.67%	6,026
Education (D,C): Missing	−0.009	0.010	0.082	−10.78%	10,665	0.004	0.013	0.085	5.27%	6,521
Parent eduction: less than high school	−0.001	0.027	0.519	−0.17%	6,784	−0.016	0.037	0.592	−2.73%	2,810
Parent eduction: high school or more	0.001	0.027	0.481	0.18%	6,784	0.016	0.037	0.408	3.95%	2,810
Parent eduction: missing	0.056	0.021	0.308	18.28%	10,665	0.004	0.025	0.556	0.79%	6,521
Has spouse in Domino as of Jul 2014(D)	0.002	0.014	0.113	1.71%	10,665	−0.030	0.020	0.226	−13.38%	6,521
No spouse in Domino as of Jul 2014(D)	−0.002	0.014	0.887	−0.22%	10,665	0.030	0.020	0.774	3.91%	6,521
Married (C)	0.000	0.016	0.090	0.11%	7,343	−0.050	0.026	0.264	−19.02%	4,204
Not married (C)	−0.017	0.020	0.854	−1.96%	7,343	0.022	0.029	0.663	3.28%	4,204
Has child in 2014 (D)	−0.001	0.017	0.200	−0.42%	10,665	−0.019	0.024	0.422	−4.52%	6,521
No child in 2014 (D)	0.001	0.017	0.800	0.10%	10,665	0.019	0.024	0.578	3.31%	6,521
Parent listed in DOMINO as of Jul 2014 (D)	−0.025	0.012	0.913	−2.71%	10,665	−0.006	0.023	0.700	−0.92%	6,521
No parent list in DOMINO as of Jul 2014 (D)	0.025	0.012	0.087	28.37%	10,665	0.006	0.023	0.300	2.14%	6,521
Live with Parent Jul 2014(D): yes	−0.020	0.022	0.483	−4.16%	9,779	−0.015	0.026	0.280	−5.47%	4,464
Live with Parent Jul 2014(D): no	0.020	0.022	0.517	3.88%	9,779	0.015	0.026	0.720	2.13%	4,464
Lives with Parent or have Spouse (D)	−0.027	0.022	0.533	−5.07%	10,665	−0.037	0.024	0.411	−9.02%	6,521
Does not live with Parent or have Spouse (D)	0.027	0.022	0.467	5.79%	10,665	0.037	0.024	0.589	6.30%	6,521
Demo (D): Male & live with family	−0.017	0.020	0.333	−5.16%	10,665	−0.020	0.020	0.270	−7.53%	6,521
Demo (D): Female & live with family	−0.010	0.017	0.200	−4.92%	10,665	−0.017	0.017	0.141	−11.88%	6,521
Demo (D): Male & live alone	0.026	0.020	0.262	9.98%	10,665	0.005	0.024	0.344	1.51%	6,521
Demo (D): Female & live alone	0.001	0.018	0.205	0.45%	10,665	0.032	0.022	0.244	13.03%	6,521
Age (D): 29 and below	−0.022	0.019	0.754	−2.88%	10,665	-	-	-	-	-
Age (D): 30 and above	0.022	0.019	0.246	8.82%	10,665	-	-	-	-	-
DSP start age (D): 17	−0.027	0.020	0.349	−7.64%	10,665	-	-	-	-	-
DSP start age (D): 18-20	0.001	0.018	0.236	0.59%	10,665	-	-	-	-	-
DSP start age (D): 21-25	−0.002	0.019	0.256	−0.74%	10,665	-	-	-	-	-
DSP start age (D): 26-30	0.028	0.017	0.159	17.41%	10,665	0.006	0.021	0.237	2.38%	6,521
DSP start age (D): 31-35	-	-	-	-	-	−0.006	0.021	0.763	−0.74%	6,521
Matches to Census (C)	0.022	0.020	0.262	8.52%	10,665	0.003	0.024	0.396	0.80%	6,521
Labor force (C): employed in 2011	0.008	0.020	0.167	4.99%	7,343	−0.007	0.020	0.110	−6.09%	4,204
Labor force (C): not in labor force in 2011	0.008	0.024	0.694	1.16%	7,343	0.002	0.026	0.718	0.23%	4,204
Labor force (C): unemployed in 2011	−0.005	0.016	0.083	−6.47%	7,343	−0.003	0.016	0.123	−2.75%	4,204
Ethnicity (C): European	−0.017	0.025	0.597	−2.77%	7,343	0.002	0.031	0.571	0.39%	4,204
Ethnicity (C): Oceanic	0.037	0.024	0.257	14.56%	7,343	−0.002	0.027	0.252	−0.67%	4,204
Ethnicity (C): other	−0.021	0.016	0.146	−14.31%	7,343	−0.001	0.022	0.178	−0.30%	4,204
Aboriginal (C)	0.005	0.013	0.073	7.30%	7,343	−0.009	0.015	0.080	−11.73%	4,204
Family structure (C): 1 parent	−0.035	0.023	0.326	−10.78%	7,343	−0.018	0.026	0.221	−8.08%	4,204
Family structure (C): 2 parents	−0.023	0.025	0.375	−6.22%	7,343	−0.038	0.029	0.380	−10.08%	4,204
Family structure (C): couple, no kids	−0.004	0.011	0.054	−7.59%	7,343	−0.025	0.013	0.056	−45.76%	4,204
Family structure (C): single	0.056	0.023	0.229	24.46%	7,343	0.075	0.030	0.313	23.85%	4,204
Condition (M): intellectual	−0.018	0.019	0.292	−6.03%	10,665	-	-	-	-	-
Condition (M): musculoskeletal	−0.001	0.010	0.063	−0.89%	10,665	−0.043	0.017	0.119	−35.92%	6,521
Condition (M): other	−0.020	0.016	0.169	−11.86%	10,665	0.021	0.019	0.159	12.97%	6,521
Condition (M): psychological	0.033	0.021	0.441	7.57%	10,665	0.030	0.024	0.637	4.67%	6,521
Max impairment rating (M): ≥20	−0.006	0.009	0.954	−0.62%	10,665	-	-	-	-	-
Max impairment rating (M): <20	0.006	0.009	0.046	12.92%	10,665	-	-	-	-	-
Sum impairment rating (M): <25	−0.005	0.022	0.492	−0.91%	10,665	0.048	0.024	0.622	7.78%	6,521
Sum impairment rating (M): ≥25	0.005	0.022	0.508	0.89%	10,665	−0.048	0.024	0.378	−12.82%	6,521
Work capacity without int (M): 0 hours	0.058	0.021	0.456	12.76%	10,665	0.039	0.025	0.400	9.65%	6,521
Work capacity without int (M): 8 hours	−0.061	0.021	0.538	−11.28%	10,665	−0.032	0.025	0.581	−5.57%	6,521
Work capacity without int (M): =0	0.058	0.021	0.456	12.76%	10,665	0.039	0.025	0.400	9.65%	6,521
Work capacity without int (M): >0	−0.058	0.021	0.544	−10.72%	10,665	−0.039	0.025	0.600	−6.43%	6,521
Labor force (T): pre-reform earn = 0	0.013	0.019	0.754	1.69%	10,665	−0.007	0.018	0.867	−0.81%	6,521
Labor force (T): pre-reform earn >0	−0.013	0.019	0.246	−5.17%	10,665	0.007	0.018	0.133	5.28%	6,521
Labor force (T): pre-DSP earn = 0	−0.018	0.021	0.703	−2.50%	10,665	0.008	0.025	0.507	1.66%	6,521
Labor force (T): pre-DSP earn >0	0.018	0.021	0.297	5.90%	10,665	−0.008	0.025	0.493	−1.71%	6,521
State (D): NSW	−0.007	0.020	0.314	−2.13%	10,607	0.052	0.023	0.293	17.65%	6,479
State (D): QLD	0.003	0.018	0.237	1.15%	10,607	−0.008	0.020	0.185	−4.45%	6,479
State (D): SA	−0.004	0.013	0.082	−4.84%	10,607	0.005	0.014	0.067	7.33%	6,479
State (D): VIC	−0.017	0.019	0.263	−6.65%	10,607	−0.028	0.022	0.289	−9.83%	6,479
State (D): WA	0.023	0.011	0.062	37.03%	10,607	−0.005	0.013	0.081	−5.92%	6,479
Medical spending 2013 (MB): >median	−0.008	0.021	0.323	−2.54%	10,455	0.032	0.025	0.452	7.12%	6,299
Medical spending 2013 (MB): <median	0.008	0.021	0.677	1.21%	10,455	−0.032	0.025	0.548	−5.87%	6,299
Prescription spending 2013 (P): >median	0.003	0.020	0.292	0.87%	10,455	0.064	0.025	0.448	14.36%	6,299
Prescription spending 2013 (P): <median	−0.003	0.020	0.708	−0.36%	10,455	−0.064	0.025	0.552	−11.65%	6,299
Doesn't live with parents	0.029	0.021	0.559	5.12%	10,665	0.012	0.018	0.804	1.47%	6,521
Live with parents & they have 0 earnings between 2012-14	−0.044	0.016	0.221	−19.89%	10,665	−0.014	0.015	0.115	−12.24%	6,521
Live with parents & they have on average less than 35k earnings 2012-14	−0.007	0.012	0.097	−6.99%	10,665	-	-	-	-	-
Live with parents & they have on average more than 35k earnings 2012-14	0.022	0.015	0.123	17.90%	10,665	-	-	-	-	-
p-value on joint F test	0.433	-	-	-	-	0.118	-	-	-	-

Notes: Table presents covariate balance tests for the Start Date RD and the Birth Date RD. Point estimates and standard errors are estimates of β_1 from equation (1) for the Start Date RD and β_2 from equation (2) for the Birth Date RD, where the covariate is the left-hand-side variable. For the Start Date sample, control means are means for individuals on the left-hand side of the cutoff within 30 days of the cutoff. The Start Date sample consists of individuals who entered DSP within 15 months before or 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." For the Birth Date sample, control means are means for individuals on the left-hand side of the cutoff within 61 days of the cutoff. If the number of individuals in that cell was too small, the mean for all individuals on the left of the respective cutoff was used. The Birth Date sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January 1, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Letters in parentheses indicate the source of the covariates: DOMINO (D), 2011 Census (C), medical review file (M), prescription benefits (PB), Medicare benefits (MB), or Australian Tax Office data (T). Last row reports p-value on joint F test from seemingly unrelated regression.

Appendix Table A.3: Start Date and Birth Date RD estimates

	Start RD				Birth RD				Combined RD			
	Pt Est	Std Err	Cntrl Mean	N	Pt Est	Std Err	Cntrl Mean	N	Pt Est	Std Err	Cntrl Mean	N
Own income												
Received medical review between 2014-16	0.540	0.018	0.338	10,665	0.710	0.017	0.107	6,521	0.612	0.013	0.204	17,186
Lost DSP between 2014-16	0.145	0.014	0.062	10,665	0.157	0.017	0.067	6,521	0.150	0.011	0.065	17,186
Own DSP payments 2016-18	−$3.21	$0.39	$25.30	10,665	−$3.17	$0.50	$25.12	6,521	−$3.19	$0.31	$25.19	17,186
Own non-DSP payments 2016-18	$1.48	$0.31	$2.55	10,665	$1.92	$0.45	$3.45	6,521	$1.67	$0.27	$3.07	17,186
Own Newstart payments 2016-18	$1.18	$0.10	$0.08	10,665	$1.36	$0.16	$0.10	6,521	$1.26	$0.09	$0.09	17,186
Own all govt. payments 2016-18	−$1.72	$0.42	$27.85	10,665	−$1.26	$0.54	$28.56	6,521	−$1.52	$0.33	$28.26	17,186
Own earnings 2016-18	$1.25	$0.58	$5.79	10,665	$1.01	$0.57	$3.21	6,521	$1.14	$0.41	$4.29	17,186
Own income 2016-18	−$0.47	$0.51	$33.64	10,665	−$0.24	$0.63	$31.77	6,521	−$0.38	$0.40	$32.55	17,186
Spouse income												
Spouse all govt. payments 2016-18	$0.19	$0.34	$1.47	10,665	−$1.19	$0.64	$6.30	6,521	−$0.40	$0.34	$4.27	17,186
Spouse all govt. payments 2016-18 (conditional on having a spouse)	$2.06	$2.00	$13.04	1,294	−$2.11	$2.14	$27.87	1,231	−$0.24	$1.49	$23.94	2,525
Spouse earnings 2016-18	$0.04	$0.51	$2.92	10,665	$1.19	$0.81	$3.34	6,521	$0.54	$0.45	$3.16	17,186
Spouse earnings 2016-18 (conditional on having a spouse)	$0.94	$3.75	$25.84	1,294	$9.29	$3.89	$14.80	1,231	$5.50	$2.73	$17.73	2,525
Parent income												
Parent(s) all govt. payments 2016-18	−$0.45	$0.80	$17.27	10,665	$0.55	$0.77	$12.51	6,521	−$0.01	$0.57	$14.51	17,186
Parent(s) all govt. payments 2016-18 (conditional on living with parent)	−$0.82	$1.14	$19.93	3,978	−$1.15	$1.59	$20.56	1,039	−$0.89	$0.95	$20.17	5,017
Parent(s) all govt. payments 2016-18 (0 if live away from DSP recipient)	−$0.31	$0.44	$8.79	10,665	−$0.18	$0.25	$4.04	6,521	−$0.26	$0.27	$6.03	17,186
Parent(s) earnings 2016-18	$2.98	$1.83	$19.48	10,665	−$1.23	$1.30	$10.90	6,521	$1.17	$1.19	$14.50	17,186
Parent(s) earnings 2016-18 (conditional on living with parent)	$3.72	$2.63	$19.49	3,978	$4.20	$2.34	$7.48	1,039	$3.73	$2.09	$14.91	5,017
Parent(s) earnings 2016-18 (0 if live away from DSP recipient)	$1.44	$1.00	$8.60	10,665	$0.68	$0.38	$1.47	6,521	$1.06	$0.60	$4.46	17,186
Family income												
Family member (parent/spouse) member earnings 2016-18	$1.49	$1.12	$11.51	10,665	$1.87	$0.90	$4.81	6,521	$1.60	$0.75	$7.62	17,186
Family member (parent/spouse) member earnings 2016-18 (conditional on living with family)	$3.20	$2.26	$21.59	5,154	$7.02	$2.42	$11.71	2,201	$4.38	$1.71	$16.49	7,355
Household all govt. payments (not including own DSP) 2016-18	$1.37	$0.66	$12.81	10,665	$0.55	$0.85	$13.78	6,521	$1.01	$0.53	$13.37	17,186
Household all govt. payments (not including own DSP) 2016-18 (conditional on living with family)	$1.13	$1.11	$22.43	5,154	−$0.27	$1.57	$29.65	2,201	$0.60	$0.91	$26.16	7,355
Household earnings 2016-18	$2.74	$1.30	$17.30	10,665	$2.88	$1.10	$8.02	6,521	$2.74	$0.89	$11.91	17,186
Household earnings 2016-18 (conditional on living with family)	$5.72	$2.47	$27.93	5,154	$8.29	$2.72	$15.61	2,201	$6.45	$1.89	$21.57	7,355
Household income 2016-18	$0.90	$1.30	$55.41	10,665	$0.25	$1.26	$46.91	6,521	$0.56	$0.93	$50.48	17,186
Household income 2016-18 (conditional on living with family)	$2.98	$2.36	$74.73	5,154	$4.66	$2.45	$66.89	2,201	$3.36	$1.78	$70.69	7,355
Own health and health care use												
Prescriptions: Total value of mental drugs 2016-18	$0.15	$0.07	$0.41	10,455	$0.10	$0.08	$0.84	6,299	$0.13	$0.05	$0.66	16,754
Prescriptions: Any mental drug 2016-18	0.035	0.021	0.568	10,455	0.034	0.022	0.749	6,299	0.035	0.015	0.672	16,754
Prescriptions: Total value of antipsychotic drugs 2016-18	$0.17	$0.06	$0.28	10,455	$0.09	$0.07	$0.67	6,299	$0.14	$0.05	$0.51	16,754
Prescriptions: Any antipsychotic drug 2016-18	0.029	0.020	0.245	10,455	0.040	0.025	0.429	6,299	0.034	0.016	0.350	16,754
Prescriptions: Total value of all drugs 2016-18	$0.58	$0.29	$1.83	10,455	$0.23	$0.43	$3.33	6,299	$0.44	$0.25	$2.69	16,754
Prescriptions: Any drug 2016-18	0.001	0.013	0.880	10,455	0.015	0.012	0.931	6,299	0.007	0.009	0.909	16,754
Died 2015-19	0.000	0.006	0.020	10,665	0.012	0.008	0.031	6,521	0.005	0.005	0.026	17,186

Notes: Table presents RD estimates for the Start Date RD, Birth Date RD, and Combined Start Date and Birth Date RDs. Dollar amounts are in 1000s of 2024 AUD. Start Date RD estimates are estimates of β_1 from equation (1). Birth Date RD estimates are estimates of β_2 from equation (2). Combined RD estimates are estimates of β_4 from equation (4). Start Date control means are means for individuals on the left-hand side of the cutoff within 30 days of the cutoff. Birth Date control means are means for individuals on the left-hand side of the cutoff within 61 days of the cutoff. Combined RD control means are means for individuals within 30 days of the Start Date cutoff or 61 days of the Birth Date cutoff. Start Date sample consists of DSP recipients who entered DSP within 15 months before and 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Birth Date sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Combined sample stacks Start Date and Birth Date samples.

Appendix Table A.4: Start Date and Birth Date IV estimates

	Start RD				Birth RD			
	Pt Est	Std Err	Cntrl Mean	N	Pt Est	Std Err	Cntrl Mean	N
Own income								
Own DSP payments 2016-18	−$22.12	$1.79	$25.30	10,665	−$20.26	$2.04	$25.12	6,521
Own non-DSP payments 2016-18	$10.25	$2.11	$2.55	10,665	$12.25	$2.75	$3.45	6,521
Own Newstart payments 2016-18	$8.17	$0.75	$0.08	10,665	$8.70	$0.91	$0.10	6,521
Own all govt. payments 2016-18	−$11.87	$2.50	$27.85	10,665	−$8.02	$3.12	$28.56	6,521
Own earnings 2016-18	$8.60	$3.78	$5.79	10,665	$6.46	$3.50	$3.21	6,521
Own income 2016-18	−$3.27	$3.55	$33.64	10,665	−$1.56	$4.00	$31.77	6,521
Spouse income								
Spouse all govt. payments 2016-18	$1.34	$2.36	$1.47	10,665	−$7.58	$4.21	$6.30	6,521
Spouse all govt. payments 2016-18 (conditional on having a spouse)	$7.34	$7.33	$13.04	1,294	−$7.73	$7.87	$27.87	1,231
Spouse earnings 2016-18	$0.31	$3.52	$2.92	10,665	$7.60	$5.15	$3.34	6,521
Spouse earnings 2016-18 (conditional on having a spouse)	$3.34	$13.28	$25.84	1,294	$34.03	$14.27	$14.80	1,231
Parent income								
Parent(s) all govt. payments 2016-18	−$3.09	$5.55	$17.27	10,665	$3.53	$4.92	$12.51	6,521
Parent(s) all govt. payments 2016-18 (conditional on living with parent)	−$6.57	$9.16	$19.93	3,978	−$12.14	$17.20	$20.56	1,039
Parent(s) all govt. payments 2016-18 (0 if live away from DSP recipient)	−$2.16	$3.02	$8.79	10,665	−$1.18	$1.63	$4.04	6,521
Parent(s) earnings 2016-18	$20.53	$12.77	$19.48	10,665	−$7.85	$8.34	$10.90	6,521
Parent(s) earnings 2016-18 (conditional on living with parent)	$29.87	$21.57	$19.49	3,978	$44.34	$30.22	$7.48	1,039
Parent(s) earnings 2016-18 (0 if live away from DSP recipient)	$9.97	$6.98	$8.60	10,665	$4.34	$2.45	$1.47	6,521
Family income								
Family member (parent/spouse) member earnings 2016-18	$10.28	$7.78	$11.51	10,665	$11.94	$5.71	$4.81	6,521
Family member (parent/spouse) member earnings 2016-18 (conditional on living with family)	$20.64	$14.66	$21.59	5,154	$37.65	$13.59	$11.71	2,201
Household all govt. payments (not including own DSP) 2016-18	$9.43	$4.55	$12.81	10,665	$3.49	$5.37	$13.78	6,521
Household all govt. payments (not including own DSP) 2016-18 (conditional on living with family)	$7.28	$7.16	$22.43	5,154	−$1.47	$8.41	$29.65	2,201
Household earnings 2016-18	$18.88	$8.80	$17.30	10,665	$18.40	$6.76	$8.02	6,521
Household earnings 2016-18 (conditional on living with family)	$36.92	$15.85	$27.93	5,154	$44.49	$14.41	$15.61	2,201
Household income 2016-18	$6.19	$9.01	$55.41	10,665	$1.62	$8.03	$46.91	6,521
Household income 2016-18 (conditional on living with family)	$19.22	$15.37	$74.73	5,154	$25.02	$13.29	$66.89	2,201
Own health and health care use								
Prescriptions: Total value of mental drugs 2016-18	$1.05	$0.46	$0.41	10,455	$0.64	$0.49	$0.84	6,299
Prescriptions: Any mental drug 2016-18	0.238	0.146	0.568	10,455	0.214	0.142	0.749	6,299
Prescriptions: Total value of antipsychotic drugs 2016-18	$1.13	$0.45	$0.28	10,455	$0.57	$0.48	$0.67	6,299
Prescriptions: Any antipsychotic drug 2016-18	0.194	0.137	0.245	10,455	0.254	0.164	0.429	6,299
Prescriptions: Total value of all drugs 2016-18	$3.93	$2.02	$1.83	10,455	$1.47	$2.74	$3.33	6,299
Prescriptions: Any drug 2016-18	0.009	0.085	0.880	10,455	0.093	0.078	0.931	6,299
Died 2015-19	−0.003	0.042	0.020	10,665	0.074	0.052	0.031	6,521

Notes: Table presents IV estimates for the Start Date RD and Birth Date RD (i.e., β_5 from equation (5) but using only one of the RDs). Dollar amounts are in 1000s of 2024 AUD. Control means are means for individuals on the left-hand side of the cutoff, within 30 days of the cutoff for the Start Date RD sample, and within 61 days of the cutoff for the Birth Date RD sample. Household variables sum income across the individual DSP recipient and (where applicable) spouses and parents who live with the DSP recipient.

Appendix Table A.5: Combined sample: IV estimates by subgroup

	DSP benefits			Earnings			Any work			Non-DSP benefits			Family (Parent/Spouse) earnings >5k			Household income			
Group	Pt Est	Std Err	Cntrl Mean	Pt Est	Std Err	Cntrl Mean	Pt Est	Std Err	Cntrl Mean	Pt Est	Std Err	Cntrl Mean	Pt Est	Std Err	Cntrl Mean	Pt Est	Std Err	Cntrl Mean	N
All	−$21.23	$1.36	$25.19	$7.56	$2.62	$4.29	0.11	0.10	0.28	$11.18	$1.73	$3.07	0.16	0.06	0.16	$3.62	$6.16	$50.48	17,186
Male	−$19.99	$2.08	$25.26	$4.58	$4.31	$5.17	0.09	0.15	0.29	$11.22	$1.51	$1.15	0.20	0.09	0.15	−$0.95	$9.23	$49.65	10,148
Female	−$22.45	$1.73	$25.08	$10.46	$3.07	$2.94	0.13	0.12	0.27	$11.06	$2.85	$6.03	0.11	0.09	0.17	$8.23	$8.11	$51.75	7,038
29 and below	−$20.30	$2.14	$24.74	$10.10	$4.67	$6.05	−0.11	0.18	0.46	$8.34	$2.35	$2.41	0.24	0.11	0.27	$6.64	$11.83	$59.40	7,501
30 and above	−$21.94	$1.74	$25.40	$6.39	$3.10	$3.47	0.26	0.11	0.21	$12.80	$2.36	$3.38	0.10	0.08	0.11	$2.46	$6.71	$46.35	9,685
Has spouse	−$17.26	$1.96	$18.66	$4.34	$4.21	$6.06	0.09	0.14	0.28	$7.87	$3.73	$7.96	0.23	0.15	0.39	$14.84	$9.22	$77.02	2,525
No spouse	−$23.62	$1.49	$26.61	$8.99	$3.18	$3.90	0.12	0.12	0.27	$12.94	$1.83	$2.01	0.17	0.05	0.10	$5.22	$6.38	$44.71	14,661
Lives with parents	−$28.00	$2.75	$25.45	$22.68	$6.09	$4.38	0.40	0.24	0.37	$8.91	$2.34	$1.35	0.60	0.19	0.32	$30.81	$20.61	$67.84	5,017
Lives away from parents	−$19.40	$1.70	$24.94	$6.17	$3.04	$4.38	0.04	0.11	0.26	$11.00	$2.21	$3.59	−0.01	0.07	0.09	−$5.23	$6.13	$43.09	9,226
Live with family	−$21.92	$1.75	$22.96	$12.05	$3.64	$5.08	0.22	0.14	0.33	$8.58	$2.49	$3.87	0.42	0.12	0.34	$20.32	$10.60	$70.69	7,355
Live alone	−$21.78	$1.75	$27.11	$3.66	$3.67	$3.61	0.02	0.14	0.23	$14.31	$2.33	$2.38	-	-	-	−$3.81	$3.73	$33.10	9,831
Psychological condition	−$22.28	$2.13	$26.77	$10.16	$3.87	$2.96	0.21	0.16	0.22	$11.70	$2.58	$2.31	0.10	0.09	0.11	$13.79	$8.99	$45.00	9,141
Intellectual condition	−$14.34	$5.47	$23.56	$6.72	$10.19	$6.91	0.16	0.42	0.44	$9.14	$5.97	$2.44	0.15	0.25	0.22	$8.85	$26.35	$56.84	2,750
Other diagnosis	−$22.47	$1.73	$23.09	$5.92	$3.72	$5.44	0.01	0.12	0.31	$12.06	$2.48	$4.76	0.24	0.09	0.21	−$3.57	$8.62	$57.30	5,297
High impairment rating	−$22.27	$2.35	$25.15	$12.12	$4.36	$3.54	0.14	0.17	0.26	$11.50	$2.80	$2.87	0.25	0.11	0.17	$21.11	$11.11	$50.97	7,112
Low impairment rating	−$20.74	$1.64	$25.23	$4.74	$3.23	$4.86	0.07	0.12	0.30	$10.56	$2.18	$3.22	0.08	0.08	0.16	−$7.45	$7.43	$50.11	10,074

Notes: Table presents IV estimates for the combined Start Date/Birth Date RDs (i.e., β_5 from equation (5) including parent earnings controls) for various subgroups. Dollar amounts are in 1000s of 2024 AUD. "Earnings" are DSP recipient's average annual own earnings from 2016–18, "Non-DSP benefits" average annual own non-DSP benefits from 2016–18, and "Household income" is the average annual sum of own, spouse, and parent earnings and government (DSP and non-DSP) benefits from 2016–18. Age and family structure are measured in the year of the reform. "Lives with family" means lives with either a parent or a spouse; "lives alone" means lives with neither a parent nor a spouse. Diagnosis and impairment rating are measured at the medical review individuals associated with DSP start date (see Appendix Section B.1 for a full description of this matching process). "High impairment rating" means having more than 25 "points" across multiple impairment tables, low impairment rating means having 25 or fewer "points."

Appendix Table A.6: Combined sample: Parent earnings response heterogeneity

	All parents						Parents that live with DSP recipient (0 if live away)									
	Any work			Earnings			Any work			Earnings			Household income			
Group	Pt Est	Std Err	Cntrl Mean	Pt Est	Std Err	Cntrl Mean	Pt Est	Std Err	Cntrl Mean	Pt Est	Std Err	Cntrl Mean	Pt Est	Std Err	Cntrl Mean	N
Full sample	0.120	0.093	0.301	$7.20	$7.82	$14.50	0.124	0.037	0.099	$6.96	$3.95	$4.46	$3.62	$6.16	$50.48	17,186
Has a parent in DOMINO	0.177	0.102	0.381	$10.09	$8.91	$18.37	0.147	0.044	0.125	$8.10	$4.56	$5.65	$3.88	$6.77	$52.46	14,243
Lives with parent 2014	0.519	0.179	0.331	$31.95	$18.93	$14.91	0.519	0.179	0.331	$31.95	$18.93	$14.91	$30.81	$20.61	$67.84	5,017
Lives away from parent 2014	0.038	0.124	0.412	$2.56	$10.24	$20.47	0.000	0.000	-	$0.00	$0.00	-	−$5.23	$6.13	$43.09	9,226
Lives with parent or spouse	0.190	0.112	0.302	$11.62	$9.50	$12.42	0.266	0.081	0.214	$14.32	$8.27	$9.64	$20.32	$10.60	$70.69	7,355

Notes: Table presents IV estimates for the combined Start Date/Birth Date RDs (i.e., β_5 from equation (5)) for parent earnings and employment. Dollar amounts are in 1000s of 2024 AUD. Combined sample stacks the Start Date RD and Birth Date RD samples. Column labels: "All Parents" presents outcomes for all parents that are linked in DOMINO. "Parents that live with DSP recipient (0 if live away)" sets parent earnings/employment to 0 for parents who do not live with the DSP recipient. Row labels condition the sample. "Full sample" is the full DSP sample (where parent earnings/employment are set to 0 if the DSP recipient does not have a parent in DOMINO), "Has a parent in DOMINO" is the sample of DSP recipients who have a parent in DOMINO, "Lives with parent 2014" is the sample of DSP recipients who live in the same meshblock as a parent in DOMINO in July 2014, "Lives away from parent 2014" is the sample of DSP recipients who has a parent in DOMINO but does not live in the same meshblock as the parent in July 2014, "Lives with parent or spouse" is the sample of DSP recipients who either lives with a parent or has a spouse in July 2014. For DSP recipients with more than one parent, we sum parent earnings and "any work" indicates that either parent works.

Appendix Table A.7: Combined sample: IV estimates of the effect of DSP loss on other program receipt

	Own				Spouses				Parents: any parent				Parents: live with DSP recipient			
	Pt Est	Std Err	Cntrl Mean	N	Pt Est	Std Err	Cntrl Mean	N	Pt Est	Std Err	Cntrl Mean	N	Pt Est	Std Err	Cntrl Mean	N
All programs	−$10.05	$1.99	$28.26	17,186	−$0.75	$5.36	$23.94	2,525	$2.08	$4.09	$18.38	14,243	−$7.47	$8.22	$20.17	5,017
Non-DSP programs	$11.18	$1.73	$3.07	17,186	$3.76	$5.59	$21.45	2,525	$1.61	$3.59	$12.11	14,243	−$9.46	$7.61	$14.37	5,017
People with Disability																
Disability Support Pension (DSP)	−$21.23	$1.36	$25.19	17,186	−$4.51	$2.29	$2.49	2,525	$0.48	$2.70	$6.27	14,243	$1.99	$5.32	$5.80	5,017
Medical Equipment Payment (MEP)	−$0.00	$0.00	$0.00	17,186	−$0.01	$0.01	$0.00	2,525	−$0.00	$0.01	$0.00	14,243	$0.02	$0.02	$0.00	5,017
Mobility Allowance (MOB)	$0.32	$0.12	$0.08	17,186	−$0.06	$0.06	$0.01	2,525	$0.06	$0.06	$0.02	14,243	$0.07	$0.09	$0.01	5,017
Wife Pension (Disability Support Pension) (WFD)	-	-	-	-	-	-	-	-	$0.39	$0.31	$0.12	14,243	$0.22	$0.77	$0.09	5,017
Carers																
Carer Allowance (CDA)	−$0.23	$0.25	$0.20	17,186	$0.07	$0.93	$1.71	2,525	−$0.59	$0.65	$1.50	14,243	−$1.34	$1.69	$2.18	5,017
Carer Payment (CAR)	$0.47	$0.26	$0.03	17,186	$0.66	$2.77	$5.41	2,525	−$3.92	$1.96	$3.36	14,243	−$11.22	$5.35	$6.21	5,017
Families																
Child Care Benefit (Formal) (CCF)	$0.01	$0.10	$0.08	17,186	$0.31	$0.40	$0.17	2,525	$0.08	$0.07	$0.01	14,243	$0.31	$0.19	$0.01	5,017
Child Care Benefit (Informal) (CCI)	$0.00	$0.00	$0.00	17,186	−$0.00	$0.00	$0.00	2,525	$0.00	$0.00	-	14,243	$0.00	$0.00	-	5,017
Dad and Partner Pay (DAP)	−$0.01	$0.01	$0.00	17,186	−$0.01	$0.03	$0.01	2,525	$0.00	$0.00	-	0	-	-	-	-
Double Orphan Pension (DOP)	−$0.00	$0.00	-	17,186	$0.00	$0.00	-	0	$0.00	$0.02	-	14,243	$0.01	$0.01	-	5,017
Family Tax Benefit (FTB)	−$0.95	$1.37	$2.45	17,186	$2.06	$3.18	$8.37	2,525	$2.09	$1.14	$1.21	14,243	$3.63	$2.23	$1.20	5,017
Parental Leave Pay (PPL)	−$0.03	$0.07	$0.02	17,186	$0.20	$0.24	$0.13	2,525	$0.03	$0.02	-	14,243	$0.00	$0.00	-	0
Parenting Payment Partnered (PPP)	$0.74	$0.15	-	17,186	−$0.06	$1.13	$1.68	2,525	$0.18	$0.11	$0.01	14,243	$0.31	$0.31	$0.02	5,017
Parenting Payment Single (PPS)	$1.97	$0.33	$0.03	17,186	$0.95	$1.41	$1.55	2,525	$0.29	$0.42	$0.15	14,243	−$0.03	$0.78	$0.10	5,017
Partner Allowance (PTA)	-	-	-	-	-	-	-	-	$0.14	$0.13	$0.01	14,243	$0.61	$0.41	-	5,017
Stillborn Baby Payment (SBP)	−$0.00	$0.00	$0.00	17,186	$0.00	$0.00	-	0	$0.00	$0.00	-	0	$0.00	$0.00	-	0
Youth and Students																
Abstudy (ABY)	−$0.02	$0.02	-	17,186	−$0.02	$0.02	-	2,525	−$0.08	$0.07	$0.01	14,243	−$0.30	$0.21	-	5,017
Austudy (AUS)	$0.53	$0.16	-	17,186	$0.15	$0.33	$0.13	2,525	−$0.07	$0.12	$0.02	14,243	$0.10	$0.14	$0.01	5,017
Pensioner Education Supp. - Abstudy (EPA)	$0.01	$0.02	$0.00	17,186	−$0.01	$0.01	-	2,525	$0.00	$0.01	-	14,243	−$0.04	$0.05	-	5,017
Pensioner Education Supp. - FaCS (EPF)	−$0.02	$0.05	$0.05	17,186	−$0.00	$0.04	$0.02	2,525	−$0.01	$0.02	$0.01	14,243	−$0.01	$0.04	$0.01	5,017
Youth Allowance (YAL)	$0.00	$0.03	-	17,186	−$0.62	$0.37	$0.05	2,525	-	-	-	-	-	-	-	-
Job Seekers																
Jobseeker Payment (JSP)	$0.00	$0.00	-	17,186	$0.00	$0.00	-	0	−$0.00	$0.00	-	14,243	$0.00	$0.00	-	0
Newstart Allowance (NSA)	$8.41	$0.59	$0.09	17,186	$0.48	$1.34	$1.96	2,525	$1.45	$1.03	$1.58	14,243	$1.46	$1.88	$1.27	5,017
Older Australians																
Age Pension (AGE)	-	-	-	-	−$0.22	$0.32	-	2,525	$0.39	$2.06	$4.02	14,243	−$3.85	$3.58	$3.07	5,017
Wife Pension (Age Pension) (WFA)	-	-	-	-	-	-	-	-	$0.48	$0.25	$0.10	14,243	−$0.02	$0.72	$0.17	5,017
Other Programs																
Bereavement Allowance (BVA)	-	-	-	-	-	-	-	-	$0.00	$0.00	$0.00	14,243	$0.00	$0.00	-	0
Business Services Wage Assessment Tool (BSW)	−$0.05	$0.06	$0.01	17,186	−$0.00	$0.00	-	2,525	$0.03	$0.03	-	14,243	−$0.03	$0.03	-	5,017
Senior Health Card (SHC)	-	-	-	-	-	-	-	-	−$0.00	$0.01	$0.00	14,243	$0.00	$0.01	$0.00	5,017
Sickness Allowance (SKA)	$0.04	$0.03	-	17,186	−$0.11	$0.10	-	2,525	−$0.04	$0.08	$0.02	14,243	$0.11	$0.20	$0.01	5,017
Transition to Independent Living Allowance (TLA)	−$0.00	$0.00	-	17,186	$0.00	$0.00	-	0	-	-	-	-	-	-	-	-
Widow Allowance (WDA)	-	-	-	-	-	-	-	-	$0.72	$0.34	$0.13	14,243	$0.53	$0.63	$0.12	5,017
NDIS																
NDIS: first plan value	$3.87	$12.00	$19.17	17,186	-	-	-	-	-	-	-	-	-	-	-	-
NDIS: on NDIS in 2022	−0.061	0.088	0.239	17,186	-	-	-	-	-	-	-	-	-	-	-	-
NDIS: started NDIS in 2017	0.016	0.034	0.025	17,186	-	-	-	-	-	-	-	-	-	-	-	-

Notes: Table presents IV estimates for the combined Start Date/Birth Date RDs (i.e., β_5 from equation (5) including parent earnings controls). Dollar amounts are in 1000s of 2024 AUD. Control means are means for individuals on the left-hand side of the cutoff, within 30 days of the cutoff for the start date sample, and within 61 days of the cutoff for the birthdate sample. Combined sample stacks the Start Date RD and Birth Date RD samples. Start Date sample is DSP recipients who entered DSP within 15 months before and 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Birth Date RD sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January 1, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Cells marked with '-' either contained 0 observations, or so few that the cell did not meet the clearance rules set by the Australian Bureau of Statistics. Program codes are in parenthesis following the program name. More information about each program can be found on the Services Australia website.

Appendix Table A.8: Combined sample: Annual DSP, non-DSP and total income variables

	DSP benefits		Non-DSP benefits		Own earnings		Own total income		Household earnings		Household total income		
Year	Pt Est	Std Err	Pt Est	Std Err	Pt Est	Std Err	Pt Est	Std Err	Pt Est	Std Err	Pt Est	Std Err	N
2010	$1.59	$1.93	−$2.08	$1.85	$0.53	$2.29	$0.04	$2.41	−$2.12	$5.35	−$8.29	$5.77	17,186
2011	$0.57	$1.92	$0.02	$1.71	−$0.11	$1.98	$0.49	$2.22	−$1.56	$5.20	−$6.38	$5.67	17,186
2012	$2.44	$1.56	$0.02	$1.55	$1.19	$1.83	$3.66	$2.21	$0.60	$4.97	−$1.74	$5.61	17,186
2013	−$2.18	$1.40	−$0.10	$1.51	−$0.07	$1.99	−$2.35	$2.28	$1.70	$5.14	−$4.23	$5.73	17,186
2014	$2.55	$1.45	−$0.10	$1.62	−$1.03	$2.03	$1.41	$2.31	$2.94	$5.18	$2.01	$5.74	17,186
2015	−$2.46	$1.55	$1.54	$1.71	$1.06	$2.22	$0.14	$2.50	$2.59	$5.43	−$1.98	$5.90	17,186
2016	−$19.95	$1.57	$11.60	$1.89	$5.52	$2.53	−$2.82	$2.75	$13.42	$5.79	$0.49	$6.30	17,186
2017	−$22.98	$1.45	$11.62	$1.87	$9.75	$2.85	−$1.61	$2.95	$21.66	$6.01	$5.46	$6.46	17,186
2018	−$20.78	$1.66	$10.32	$1.66	$7.40	$3.26	−$3.06	$3.17	$19.58	$6.34	$4.92	$6.61	17,186
2019	−$20.35	$1.84	$8.89	$1.74	$8.54	$3.65	−$2.93	$3.49	$19.21	$6.72	$4.55	$6.92	17,186
2020	−$20.45	$2.07	$10.48	$1.86	$8.55	$4.10	−$1.42	$3.87	$15.42	$7.17	$4.26	$7.32	17,186
2021	−$19.00	$2.20	$11.95	$1.88	$6.95	$4.26	−$0.10	$3.94	$11.01	$7.47	$3.41	$7.46	17,186
2022	−$16.68	$2.15	$7.14	$1.70	$9.54	$4.35	$0.01	$4.05	$16.01	$7.33	$4.79	$7.31	17,186
2023	−$17.07	$2.19	$7.21	$1.65	$9.12	$4.51	−$0.74	$4.16	$15.45	$7.41	$4.50	$7.34	17,186
2024	−$15.64	$2.37	$7.90	$1.73	-	-	-	-	-	-	-	-	17,186

Notes: Table presents IV estimates for the combined Start Date/Birth Date RDs (i.e., β_5 from equation (5) including parent earnings controls) for annual outcome variables. Dollar amounts are in 1000s of 2024 AUD. Control means are means for individuals on the left-hand side of the cutoff, within 30 days of the cutoff for the start date sample, and within 61 days of the cutoff for the birthdate sample. Combined sample stacks the Start Date RD and Birth Date RD samples. Start Date sample is DSP recipients who entered DSP within 15 months before and 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Birth Date RD sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January 1, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." All variables are at the fiscal year level which runs July to June in Australia.

Appendix Table A.9: Combined sample: IV estimates of the effect of DSP loss on occupation

	Any work				Earnings			
Variable	Pt Est	Std Err	Cntrl Mean	N	Pt Est	Std Err	Cntrl Mean	N
Own occupation								
No work reported	−0.174	0.085	0.815	17,186	-	-	-	-
All Blue Collar	0.077	0.071	0.129	17,186	$9.67	$5.72	$7.63	17,186
Technician and Trades Workers	0.030	0.030	0.018	17,186	$1.79	$2.39	$1.24	17,186
Community and Personal Service Workers	−0.002	0.042	0.037	17,186	$5.30	$3.07	$2.00	17,186
Machinery Operators and Drivers	0.037	0.027	0.015	17,186	$1.16	$2.36	$0.84	17,186
Labourers	0.017	0.051	0.067	17,186	$1.41	$3.58	$3.61	17,186
All White Collar	0.057	0.060	0.074	17,186	$14.30	$5.19	$2.56	17,186
Managers	0.032	0.022	0.010	17,186	$4.59	$2.04	$0.61	17,186
Professionals	0.010	0.033	0.021	17,186	$3.73	$3.09	$1.19	17,186
Clerical and Administrative Workers	0.080	0.035	0.023	17,186	$7.54	$2.74	$1.31	17,186
Sales Workers	−0.042	0.038	0.025	17,186	−$1.56	$2.53	$0.74	17,186
Unknown	0.049	0.026	0.013	17,186	$1.71	$1.17	$0.38	17,186
Parent(s) occupation								
No work reported	−0.648	0.220	0.748	5,017	-	-	-	-
All Blue Collar	0.413	0.193	0.167	5,017	$57.60	$37.74	$14.93	5,017
Technician and Trades Workers	0.000	0.087	-	5,017	−$9.29	$24.35	$5.09	5,017
Community and Personal Service Workers	0.192	0.144	0.073	5,017	$43.55	$24.17	$6.00	5,017
Machinery Operators and Drivers	−0.047	0.077	-	5,017	$4.72	$14.19	$4.66	5,017
Labourers	0.192	0.122	0.049	5,017	$18.62	$15.97	$4.26	5,017
All White Collar	0.203	0.188	0.225	5,017	$9.87	$53.59	$27.03	5,017
Managers	0.066	0.104	0.037	5,017	$3.69	$38.12	$7.58	5,017
Professionals	−0.053	0.147	0.091	5,017	$13.14	$36.14	$12.98	5,017
Clerical and Administrative Workers	0.175	0.147	0.082	5,017	$0.43	$25.51	$12.47	5,017
Sales Workers	0.018	0.091	-	5,017	−$7.39	$10.97	$3.06	5,017
Unknown	0.037	0.071	-	5,017	$10.32	$12.89	$1.12	5,017
Spouse occupation								
No work reported	−0.036	0.133	0.775	2,525	-	-	-	-
All Blue Collar	−0.061	0.147	0.310	2,525	$27.28	$24.43	$37.92	2,525
Technician and Trades Workers	0.053	0.077	0.061	2,525	$27.67	$14.49	$6.92	2,525
Community and Personal Service Workers	0.132	0.093	0.103	2,525	$11.23	$9.98	$8.81	2,525
Machinery Operators and Drivers	−0.246	0.084	0.058	2,525	−$32.29	$13.08	$11.84	2,525
Labourers	0.011	0.101	0.109	2,525	$20.67	$15.02	$11.07	2,525
All White Collar	0.107	0.117	0.167	2,525	$26.01	$19.37	$14.03	2,525
Managers	−0.028	0.058	0.039	2,525	$2.12	$10.02	$5.64	2,525
Professionals	0.057	0.071	0.055	2,525	$22.98	$12.65	$6.16	2,525
Clerical and Administrative Workers	0.022	0.062	0.039	2,525	−$0.11	$7.78	$3.34	2,525
Sales Workers	0.011	0.069	0.053	2,525	$1.01	$8.42	$4.64	2,525
Unknown	0.016	0.042	-	2,525	$2.84	$2.46	$0.64	2,525

Notes: Table presents IV estimates for the combined Start Date/Birth Date RDs (i.e., β_5 from equation (5) including parent earnings controls) for occupation, and earnings inside an occupation. Dollar amounts are in 1000s of 2024 AUD. Control means are means for individuals on the left-hand side of the cutoff, within 30 days of the cutoff for the start date sample, and within 61 days of the cutoff for the birthdate sample. Combined sample stacks the Start Date RD and Birth Date RD samples. Start Date sample is DSP recipients who entered DSP within 15 months before and 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Birth Date RD sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January 1, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Cells marked with '-' either contained 0 observations, or so few that the cell did not meet the clearance rules set by the Australian Bureau of Statistics. Occupation is taken from annual tax returns, if an individual reports an occupation in any one of 2015-16, 2016-17 or 2017-18 we code them in that occupation, therefore individuals can have multiple occupations across the three years.

Appendix Table A.10: Combined sample: Earnings thresholds

	Earnings above: $0			$5,000			$10,000			$40,000			
	Pt Est	Std Err	Cntrl Mean	Pt Est	Std Err	Cntrl Mean	Pt Est	Std Err	Cntrl Mean	Pt Est	Std Err	Cntrl Mean	N
Own earnings	0.110	0.098	0.280	0.138	0.082	0.155	0.148	0.073	0.123	0.144	0.038	0.030	17,186
Parent earnings (any parent)	0.177	0.102	0.381	0.228	0.101	0.338	0.155	0.098	0.311	0.139	0.088	0.188	14,243
Parent earnings (live with DSP recipient)	0.519	0.179	0.331	0.607	0.182	0.302	0.475	0.171	0.266	0.326	0.161	0.216	5,017
Spouse earnings	−0.041	0.155	0.489	0.222	0.153	0.378	0.211	0.150	0.349	0.112	0.129	0.196	2,525
Other family member earnings	0.232	0.121	0.391	0.419	0.122	0.340	0.364	0.118	0.302	0.227	0.105	0.186	7,355
Household earnings	0.221	0.130	0.540	0.473	0.130	0.414	0.508	0.128	0.367	0.262	0.110	0.214	7,355

Notes: Table presents IV estimates for the combined Start Date/Birth Date RDs (i.e., β_5 from equation (5) including parent earnings controls) for earnings above different thresholds. Control means are means for individuals on the left-hand side of the cutoff, within 30 days of the cutoff for the start date sample, and within 61 days of the cutoff for the birthdate sample. Combined sample stacks the Start Date RD and Birth Date RD samples. Start Date sample is DSP recipients who entered DSP within 15 months before and 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Birth Date RD sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January 1, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating."

Appendix Table A.11: Combined sample: Joint own work and family work

Variable	Pt Est	Std Err	Cntrl Mean	N
Household				
Positive own earnings and positive household earnings	0.222	0.136	0.335	7,355
No own earnings and positive household earnings	−0.001	0.124	0.205	7,355
No own earnings and no household earnings	−0.221	0.130	0.460	7,355
Spouse				
Positive own earnings and positive spouse earnings	0.117	0.124	0.188	2,525
No own earnings and positive spouse earnings	−0.158	0.142	0.301	2,525
Positive own earnings and no spouse earnings	−0.024	0.097	0.096	2,525
No own earnings and no spouse earnings	0.065	0.151	0.415	2,525
Parent				
Positive own earnings and positive parental earnings	0.378	0.190	0.186	5,017
No own earnings and positive parental earnings	0.141	0.201	0.222	5,017
Positive own earnings and no parent earnings	0.023	0.178	0.161	5,017
No own earnings and no parent earnings	−0.542	0.210	0.431	5,017

Notes: Table presents IV estimates for the combined Start Date/Birth Date RDs (i.e., β_5 from equation (5) including parent earnings controls) for joint own work and family work outcomes. Control means are means for individuals on the left-hand side of the cutoff, within 30 days of the cutoff for the start date sample, and within 61 days of the cutoff for the birthdate sample. Combined sample stacks the Start Date RD and Birth Date RD samples. Start Date sample is DSP recipients who entered DSP within 15 months before and 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Birth Date RD sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January 1, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating."

Appendix Table A.12: Combined sample: Joint work of DSP recipients and program receipt

	Work and receive benefits			No work and receive benefits			Work and no benefits			No work and no benefits			
	Pt Est	Cntrl Mean	Std Err	Pt Est	Cntrl Mean	Std Err	Pt Est	Cntrl Mean	Std Err	Pt Est	Cntrl Mean	Std Err	N
Own government payments													
Any non-DSP payments	0.256	0.131	0.075	0.228	0.209	0.091	−0.146	0.148	0.079	−0.338	0.512	0.105	17,186
Any program	0.071	0.275	0.097	−0.111	0.709	0.098	0.039	0.007	0.019	0.001	0.009	0.020	17,186
Disability Support Pension (DSP)	−0.118	0.270	0.096	−0.309	0.706	0.097	0.229	0.012	0.032	0.199	0.012	0.032	17,186
Newstart Allowance (NSA)	0.423	0.011	0.040	0.398	0.006	0.038	−0.313	0.271	0.097	−0.509	0.712	0.096	17,186

Notes: Table presents IV estimates for the combined Start Date/Birth Date RDs (i.e., β_5 from equation (5) including parent earnings controls) for joint own work and own program receipt. Control means are means for individuals on the left-hand side of the cutoff, within 30 days of the cutoff for the start date sample, and within 61 days of the cutoff for the birthdate sample. Combined sample stacks the Start Date RD and Birth Date RD samples. Start Date sample is DSP recipients who entered DSP within 15 months before and 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Birth Date RD sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January 1, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating."

Appendix Table A.13: Correlation between earnings and prescription use across subgroups

		Earnings above threshold ($AUD)						
Any drug	Earnings variable	0	1,000	5,000	10,000	20,000	30,000	40,000
Mental	Other family member earnings	−0.40	−0.36	−0.32	−0.29	−0.36	−0.37	−0.11
Mental	Own earnings	−0.13	−0.19	−0.49	−0.42	−0.60	−0.58	−0.34

Notes: Table shows correlation coefficients between the IV estimates for the combined Start Date/Birth Date RDs (i.e., β_5 from equation (5) including parent earnings controls) for earnings above a given threshold and either any mental health prescription across the subgroups shown in the top panel of Appendix Figure A.6: sex, age, education, type of condition, and family structure. Combined sample stacks the Start Date RD and Birth Date RD samples. Start Date sample is DSP recipients who entered DSP within 15 months before and 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Birth Date RD sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January 1, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating."

Appendix Table A.14: Combined sample: Prescription results

	Any			Quantity			Total cost			
	Pt Est	Std Err	Cntrl Mean	Pt Est	Std Err	Cntrl Mean	Pt Est	Std Err	Cntrl Mean	N
Main categories										
All (any drug in PBS)	0.049	0.059	0.909	422.2	383.4	1,027.7	$2,846	$1,694	$2,687	16,754
All excluding drugs for Hep C	-	-	-	417.0	382.9	1,024.3	$1,862	$1,138	$1,669	16,754
Mental (overall)	0.230	0.104	0.672	210.1	155.3	453.0	$875	$342	$657	16,754
Antipsychotic	0.226	0.107	0.350	148.4	88.3	176.2	$885	$333	$506	16,754
Antidepressant	0.176	0.110	0.492	76.6	71.1	159.5	$44	$40	$98	16,754
Anxiolytic	0.030	0.099	0.344	−4.6	50.0	90.5	−$1	$19	$33	16,754
ADHD	−0.051	0.039	0.030	−0.5	43.0	16.5	−$47	$30	$13	16,754
Hypnotic/Sedatives	−0.036	0.073	0.155	−9.9	9.7	10.3	−$6	$6	$6	16,754
Pain (overall)	0.203	0.108	0.530	43.3	152.0	157.5	−$36	$130	$192	16,754
Opioid	0.231	0.108	0.412	−18.8	132.7	83.9	−$15	$88	$108	16,754
Select Anatomical Therapeutic Chemical (ATC) Classifications										
Drugs for Acid Related Disorders (A02)	0.131	0.098	0.304	23.2	28.9	46.2	$15	$22	$42	16,754
Drugs for Functional Gastrointestinal Disorders (A03)	0.062	0.076	0.131	15.7	6.6	4.1	$7	$3	$2	16,754
Corticosteroids, Dermatological Preparations (D07)	0.099	0.086	0.184	1.3	0.6	0.2	$18	$7	$3	16,754
Sex Hormones and Modulators of the Genital System (G03)	0.055	0.084	0.151	−9.1	10.1	7.2	−$71	$37	$29	16,754
Corticosteroids for Systemic Use (H02)	−0.113	0.082	0.180	−25.9	16.0	8.5	−$8	$5	$4	16,754
Antibacterials for Systemic Use (J01)	0.019	0.099	0.685	15.3	17.6	28.0	$12	$48	$32	16,754
Antivirals for Systemic Use (J05)	0.080	0.054	0.071	5.2	8.0	3.4	$984	$1,224	$1,018	16,754
Immunosuppressants (L04)	−0.033	0.036	0.029	3.2	40.5	16.4	$111	$596	$309	16,754
Antiinflammatory and Antirheumatic Products (M01)	−0.007	0.099	0.299	13.7	17.7	21.3	$5	$8	$11	16,754
Analgesics (N02)	0.260	0.109	0.450	10.3	145.3	130.5	−$44	$114	$164	16,754
Antiepileptics (N03)	0.154	0.080	0.124	41.2	100.6	114.5	$30	$93	$53	16,754
Psycholeptics (N05)	0.257	0.110	0.539	133.9	108.5	277.0	$878	$335	$546	16,754
Psychoanaleptics (N06)	0.140	0.110	0.501	76.3	85.7	176.0	−$3	$51	$111	16,754
Other Nervous System Drugs (N07)	0.101	0.074	0.140	−36.3	28.6	9.7	−$1	$26	$25	16,754
Drugs for Obstructive Airway Diseases (R03)	0.080	0.096	0.273	−1.1	3.2	2.5	$23	$66	$64	16,754
Otologicals (S02)	0.007	0.065	0.091	0.0	0.1	0.1	−$1	$1	$2	16,754
Parent prescriptions										
Alimentary Tract and Metabolism (A)	−0.252	0.261	0.590	124.1	258.4	211.0	$137	$342	$253	4,972
Blood and Blood Forming Organs (B)	−0.276	0.223	0.237	−121.4	65.8	24.5	−$518	$352	$87	4,972
Cardiovascular System (C)	−0.240	0.259	0.604	−177.6	262.6	264.5	$58	$329	$177	4,972
Dermatologicals (D)	0.606	0.262	0.288	−0.5	4.5	1.0	$21	$27	$13	4,972
Genito Urinary System and Sex Hormones (G)	−0.264	0.227	0.226	3.0	43.2	11.4	−$17	$41	$18	4,972
Systemic Hormonal Preparations, Excl. Sex Hormones and Insulins (H)	0.032	0.251	0.331	−44.3	95.7	48.3	−$23	$24	$10	4,972
Antiinfectives for Systemic Use (J)	−0.036	0.203	0.791	−6.3	50.0	54.3	−$952	$1,748	$287	4,972
Antineoplastic and Immunomodulating Agents (L)	0.171	0.132	0.072	371.2	394.5	84.1	$614	$2,533	$414	4,972
Musculo-Skeletal System (M)	0.446	0.271	0.360	−11.6	76.3	40.9	$169	$125	$34	4,972
Nervous System (N)	−0.006	0.239	0.655	260.2	493.2	370.4	$203	$431	$238	4,972
Antiparasitic Products, Insecticides and Repellents (P)	0.003	0.049	-	−0.1	0.1	0.0	−$0	$1	$0	4,972
Respiratory System (R)	0.062	0.255	0.424	−29.6	33.1	17.0	$9	$174	$133	4,972
Sensory Organs (S)	0.331	0.242	0.259	3.2	4.4	0.3	$182	$177	$7	4,972
Various (V)	0.103	0.067	0.022	−21.5	18.3	-	−$97	$65	-	4,972
All (any drug in PBS)	−0.080	0.111	0.942	354.0	993.7	1,061.4	−$215	$3,341	$1,540	4,972
All excluding drugs for Hep C	−0.080	0.111	0.942	354.5	993.6	1,061.2	$237	$2,906	$1,404	4,972
Mental (overall)	−0.366	0.269	0.489	−48.7	223.0	181.0	−$29	$189	$111	4,972
Antipsychotic	−0.211	0.139	0.080	−30.4	69.3	13.1	$13	$133	$13	4,972
Antidepressant	−0.514	0.273	0.374	−24.7	143.1	112.2	−$38	$89	$68	4,972
Anxiolytic	−0.002	0.212	0.201	−9.5	68.9	39.4	$2	$30	$20	4,972
ADHD	0.015	0.032	-	46.1	36.4	6.2	$12	$9	$1	4,972
Hypnotic/Sedatives	−0.016	0.181	0.144	−30.2	25.0	16.3	−$19	$15	$10	4,972
Pain (overall)	0.219	0.253	0.604	123.6	333.9	207.7	$205	$341	$136	4,972
Opioid	0.117	0.263	0.468	64.1	231.7	87.5	$97	$222	$66	4,972
Hep C	0.007	0.045	-	−0.5	2.5	0.3	−$451	$1,638	$224	4,972
Missing code	0.037	0.029	-	2.4	2.6	0.5	−$1	$8	$2	4,972
Spouse prescriptions										
Alimentary Tract and Metabolism (A)	−0.070	0.148	0.384	19.8	63.2	71.3	$113	$101	$102	2,470
Blood and Blood Forming Organs (B)	−0.063	0.100	0.125	−12.3	11.1	8.4	$18	$54	$10	2,470
Cardiovascular System (C)	0.025	0.101	0.181	−20.2	49.8	43.8	−$35	$39	$38	2,470
Dermatologicals (D)	0.136	0.117	0.170	1.6	1.2	0.6	$12	$6	$2	2,470
Genito Urinary System and Sex Hormones (G)	0.192	0.127	0.212	−3.4	6.7	3.2	$54	$25	$16	2,470
Systemic Hormonal Preparations, Excl. Sex Hormones and Insulins (H)	0.116	0.117	0.180	35.3	20.3	12.8	$24	$21	$3	2,470
Antiinfectives for Systemic Use (J)	0.326	0.141	0.694	28.6	24.1	15.4	−$190	$682	$17	2,470
Antineoplastic and Immunomodulating Agents (L)	0.001	0.041	-	−169.4	177.4	5.3	$899	$786	$40	2,470
Musculo-Skeletal System (M)	0.275	0.145	0.311	51.5	23.1	11.1	$14	$10	$8	2,470
Nervous System (N)	0.172	0.151	0.603	−8.1	186.2	307.9	−$182	$203	$311	2,470
Antiparasitic Products, Insecticides and Repellents (P)	−0.019	0.032	-	0.0	0.0	0.0	−$0	$0	$0	2,470
Respiratory System (R)	0.180	0.129	0.207	5.5	6.8	2.8	$238	$252	$14	2,470
Sensory Organs (S)	0.141	0.115	0.155	0.5	0.9	0.1	−$15	$17	$1	2,470
Various (V)	−0.026	0.029	-	0.1	0.1	-	−$2	$2	$0	2,470
All (any drug in PBS)	0.189	0.102	0.871	−65.2	308.2	483.3	$949	$1,204	$673	2,470
Mental (overall)	−0.039	0.148	0.386	−20.0	97.4	123.4	−$185	$166	$163	2,470
Antipsychotic	−0.092	0.068	0.062	−57.8	41.4	42.4	−$217	$160	$49	2,470
Antidepressant	−0.091	0.141	0.316	6.2	62.4	75.0	$18	$33	$39	2,470
Anxiolytic	0.088	0.105	0.132	3.8	26.5	5.6	−$1	$11	$2	2,470
ADHD	0.008	0.027	-	19.5	26.6	-	$11	$9	-	2,470
Hypnotic/Sedatives	0.080	0.076	0.063	8.4	4.7	1.8	$5	$3	$1	2,470
Pain (overall)	0.277	0.156	0.529	141.8	95.5	65.5	$29	$77	$92	2,470
Opioid	0.316	0.154	0.403	48.4	69.2	27.9	$10	$56	$44	2,470
Hep C	−0.023	0.023	-	−0.7	0.7	0.3	−$536	$619	$225	2,470
Missing code	0.007	0.007	-	0.0	0.0	-	$0	$0	-	2,470

Notes: Table presents IV estimates for the combined Start Date/Birth Date RDs (i.e., β_5 from equation (5) including parent earnings controls) for mental health drugs, sub-categories of mental health drug, pain drugs and select classifications from the Anatomical Therapeutic Chemical Classification System. Dollar amounts are in 2024 AUD. Combined sample stacks the Start Date RD and Birth Date RD samples. Drug classifications come from the Anatomical Therapeutic Chemical Classification System. "Any" is extensive margin drug taking between July 2015 and June 2018. "Quantity" is the mean of 'PBS adjusted quantity' between July 2015 and June 2018. "Total cost" is the sum of government and own spending on prescriptions in the PBS between July 2015 and June 2018. Combined sample stacks the Start Date RD and Birth Date RD samples. Start Date sample is DSP recipients who entered DSP within 15 months before and 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Birth Date RD sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January 1, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating."

Appendix Table A.15: Combined sample: Mental and antipsychotics by subgroup

	Total spending			Mental Rx spending			Any mental Rx			Antipsychotic spending			Any antipsychotic Rx			
Group	Pt Est	Std Err	Cntrl Mean	Pt Est	Std Err	Cntrl Mean	Pt Est	Std Err	Cntrl Mean	Pt Est	Std Err	Cntrl Mean	Pt Est	Std Err	Cntrl Mean	N
All	$1,862	$1,138	$1,669	$875	$342	$657	0.230	0.104	0.672	$885	$333	$506	0.226	0.107	0.350	16,754
Male	$2,433	$1,185	$1,349	$1,434	$606	$718	0.448	0.174	0.625	$1,493	$595	$583	0.294	0.171	0.393	9,892
Female	$1,251	$1,908	$2,155	$312	$343	$564	0.022	0.120	0.743	$268	$329	$389	0.150	0.129	0.285	6,862
29 and below	$2,481	$2,063	$1,101	$896	$468	$309	0.022	0.175	0.537	$944	$449	$186	−0.058	0.152	0.224	7,401
30 and above	$1,415	$1,330	$1,943	$805	$466	$825	0.345	0.128	0.737	$799	$458	$661	0.385	0.146	0.411	9,353
Has spouse	−$2,345	$1,508	$1,834	−$99	$289	$360	0.149	0.152	0.622	−$160	$275	$271	0.068	0.130	0.241	2,466
No spouse	$3,428	$1,451	$1,633	$1,154	$450	$722	0.236	0.128	0.692	$1,199	$441	$558	0.252	0.134	0.378	14,288
Lives with parents	$1,961	$1,873	$1,474	$455	$721	$567	0.015	0.246	0.583	$591	$698	$427	0.041	0.220	0.281	4,969
Lives away from parents	$2,126	$1,439	$1,392	$793	$373	$604	0.189	0.117	0.703	$799	$364	$440	0.167	0.122	0.360	9,079
Live with family	−$79	$1,287	$1,649	$226	$400	$502	0.117	0.146	0.577	$239	$386	$380	0.089	0.133	0.258	7,252
Live alone	$3,460	$1,795	$1,687	$1,365	$533	$796	0.316	0.144	0.756	$1,373	$523	$619	0.321	0.160	0.433	9,502
Psychological condition	$791	$1,298	$1,711	$1,024	$689	$1,068	0.025	0.137	0.865	$1,276	$689	$850	0.164	0.182	0.546	8,903
Intellectual condition	$2,766	$1,709	$476	$441	$805	$187	0.362	0.453	0.412	$164	$746	$151	−0.027	0.323	0.147	2,689
Other diagnosis	$2,612	$2,079	$2,189	$479	$181	$118	0.262	0.136	0.444	$362	$162	$61	0.175	0.088	0.111	5,164
High impairment rating	$4,147	$2,471	$1,566	$985	$533	$558	0.325	0.190	0.577	$1,032	$516	$404	0.349	0.177	0.281	6,942
Low impairment rating	$747	$1,146	$1,748	$729	$435	$733	0.163	0.119	0.745	$716	$426	$585	0.134	0.132	0.404	9,812

Notes: Table presents IV estimates for the combined Start Date/Birth Date RDs (i.e., β_5 from equation (5) including parent earnings controls) for any mental health prescription, total spending on mental health prescriptions, any antipsychotics, and total spending on antipsychotic prescriptions. Dollar amounts are in 2024 AUD. Combined sample stacks the Start Date RD and Birth Date RD samples. Drug classifications come from the Anatomical Therapeutic Chemical Classification System. Age and family structure are measured in the year of the reform. "Lives with family" means lives with either a parent or a spouse; "lives alone" means lives with neither a parent nor a spouse. Diagnosis and impairment rating are measured in the last medical review. High/low impairment rating is split at the median. Combined sample stacks the Start Date RD and Birth Date RD samples. Start Date sample is DSP recipients who entered DSP within 15 months before and 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Birth Date RD sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January 1, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating."

Appendix Table A.16: Combined sample: Medicare Benefit Schedule

	Any			
	Pt Est	Std Err	Cntrl Mean	N
Own MBS utilization				
A01: General Practitioner	0.085	0.050	0.940	16,754
A02: Other non-referred	−0.270	0.096	0.257	16,754
A03: Specialist	0.201	0.097	0.246	16,754
A04: Consultant Physician (other than Psychiatry)	0.013	0.097	0.257	16,754
A08: Consultant Psychiatrist	0.198	0.089	0.173	16,754
A10: Optometrical Consultations	0.147	0.105	0.313	16,754
A11: After Hours	−0.075	0.083	0.191	16,754
A15: Multidisciplinary Care Plans and Case Conferences	0.109	0.107	0.392	16,754
A20: GP Mental Health Treatment	0.151	0.109	0.477	16,754
A22: GP after-hours attendances to which no other item applies	−0.345	0.111	0.432	16,754
D01: Miscellaneous Diagnostic Procedures and Investigations	−0.019	0.103	0.335	16,754
I01: Ultrasound	0.107	0.109	0.432	16,754
I02: Computerised Tomography	0.056	0.092	0.233	16,754
I03: Diagnostic Radiology	0.156	0.109	0.490	16,754
M01: Management of Bulk Billed services	0.053	0.057	0.925	16,754
M03: Allied Health Services	0.056	0.089	0.191	16,754
M07: Focussed Psychological Strategies	0.170	0.084	0.146	16,754
M12: Services provided by a Practice Nurse/Registered Aboriginal Health Worker	0.038	0.083	0.177	16,754
P01: Haematology	0.067	0.108	0.548	16,754
P02: Chemical	0.119	0.095	0.718	16,754
P03: Microbiology	−0.042	0.107	0.552	16,754
P04: Immunology	0.117	0.090	0.222	16,754
P06: Cytopathology	0.172	0.083	0.157	16,754
T08: Surgical Operations	0.163	0.098	0.239	16,754
Spouse MBS utilization				
A01: General Practitioner	0.016	0.071	0.944	2,470
A08: Consultant Psychiatrist	0.041	0.073	0.052	2,470

Notes: Table presents IV estimates for the combined Start Date/Birth Date RDs (i.e., β_5 from equation (5) including parent earnings controls) for select "MBS group" services. We only present results for services that at least 15% of the control sample utilizes across the three years. Dollar amounts are in 2024 AUD. Combined sample stacks the Start Date RD and Birth Date RD samples. "MBS groups" group together different service types that are provided on the Medicare Benefits Schedule. "Any" indicates having at least one service of that type within 2016-18. Combined sample stacks the Start Date RD and Birth Date RD samples. Start Date sample is DSP recipients who entered DSP within 15 months before and 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Birth Date RD sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January 1, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating."

Appendix Table A.17: Combined sample: Family structure

Variable	Pt Est	Std Err	Cntrl Mean	N
Has spouse in 2019	−0.106	0.080	0.163	17,186
No spouse in 2019	0.106	0.080	0.837	17,186
Same spouse in 2019	−0.112	0.065	0.118	17,186
Live with parents 2019	−0.032	0.082	0.332	14,243
Live away from parents 2019	0.032	0.082	0.668	14,243
Change in live with parents	0.007	0.071	0.131	17,186
Change location between 2014 and 2019	0.105	0.105	0.553	17,186
Individual has a child between 2016 and 2021	−0.054	0.055	0.069	17,186
Distance to SA2 of parent 2019	−106.335	117.490	150.329	13,482
Number of children individual has beteween 2016 and 2021	−0.047	0.072	0.077	17,186

Notes: Table presents IV estimates for the combined Start Date/Birth Date RDs (i.e., β_5 from equation (5) including parent earnings controls) for family structure outcome variables. Control means are means for individuals on the left-hand side of the cutoff, within 30 days of the cutoff for the start date sample, and within 61 days of the cutoff for the birthdate sample. Combined sample stacks the Start Date RD and Birth Date RD samples. Combined sample stacks the Start Date RD and Birth Date RD samples. Start Date sample is DSP recipients who entered DSP within 15 months before and 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Birth Date RD sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January 1, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating."

Appendix Table A.18: Combined sample: Joint work (at different thresholds) and prescriptions

	All				Live with family				Live alone			
	Pt Est	Std Err	Cntrl Mean	N	Pt Est	Std Err	Cntrl Mean	N	Pt Est	Std Err	Cntrl Mean	N
Mental, Other family member earnings over $5000												
No rx, earnings above threshold	0.101	0.050	0.069	16,754	0.236	0.103	0.146	7,252	0.000	0.000	-	0
No rx, earnings below threshold	−0.331	0.098	0.259	16,754	−0.353	0.126	0.277	7,252	−0.316	0.144	-	9,502
Rx, earnings above threshold	0.049	0.059	0.093	16,754	0.158	0.119	0.197	7,252	0.000	0.000	-	0
Rx, earnings below threshold	0.181	0.102	0.579	16,754	−0.041	0.131	0.380	7,252	0.316	0.144	-	9,502
Mental, Own earnings over $0												
No rx, earnings above threshold	−0.044	0.070	0.111	16,754	0.143	0.105	0.152	7,252	−0.211	0.092	0.084	9,502
No rx, earnings below threshold	−0.186	0.089	0.217	16,754	−0.260	0.128	0.247	7,252	−0.104	0.121	0.205	9,502
Rx, earnings above threshold	0.146	0.085	0.177	16,754	0.073	0.115	0.177	7,252	0.218	0.122	0.177	9,502
Rx, earnings below threshold	0.084	0.108	0.494	16,754	0.044	0.145	0.424	7,252	0.098	0.155	0.535	9,502

Notes: Table presents IV estimates for the combined Start Date/Birth Date RDs (i.e., β_5 from equation (5) including parent earnings controls) for joint work and prescription outcomes. Dollar amounts are in 1000s of 2024 AUD. Control means are means for individuals on the left-hand side of the cutoff, within 30 days of the cutoff for the start date sample, and within 61 days of the cutoff for the birthdate sample. Combined sample stacks the Start Date RD and Birth Date RD samples. Combined sample stacks the Start Date RD and Birth Date RD samples. Start Date sample is DSP recipients who entered DSP within 15 months before and 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Birth Date RD sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January 1, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating."

Appendix Table A.19: RD estimates with no controls

	Start RD				Birth RD				Combined RD			
	Pt Est	Std Err	Cntrl Mean	N	Pt Est	Std Err	Cntrl Mean	N	Pt Est	Std Err	Cntrl Mean	N
Own income												
Received medical review between 2014-16	0.541	0.018	0.338	10,665	0.710	0.017	0.107	6,521	0.613	0.013	0.204	17,186
Lost DSP between 2014-16	0.147	0.014	0.062	10,665	0.157	0.017	0.067	6,521	0.151	0.011	0.065	17,186
Own DSP payments 2016-18	−$3.28	$0.39	$25.30	10,665	−$3.18	$0.50	$25.12	6,521	−$3.24	$0.31	$25.19	17,186
Own non-DSP payments 2016-18	$1.54	$0.32	$2.55	10,665	$1.95	$0.45	$3.45	6,521	$1.72	$0.27	$3.07	17,186
Own Newstart payments 2016-18	$1.19	$0.10	$0.08	10,665	$1.36	$0.16	$0.10	6,521	$1.26	$0.09	$0.09	17,186
Own all govt. payments 2016-18	−$1.73	$0.42	$27.85	10,665	−$1.23	$0.54	$28.56	6,521	−$1.52	$0.33	$28.26	17,186
Own earnings 2016-18	$1.36	$0.58	$5.79	10,665	$1.02	$0.57	$3.21	6,521	$1.22	$0.42	$4.29	17,186
Own income 2016-18	−$0.38	$0.51	$33.64	10,665	−$0.21	$0.63	$31.77	6,521	−$0.30	$0.40	$32.55	17,186
Spouse income												
Spouse all govt. payments 2016-18	$0.27	$0.34	$1.47	10,665	−$1.15	$0.64	$6.30	6,521	−$0.33	$0.34	$4.27	17,186
Spouse all govt. payments 2016-18 (conditional on having a spouse)	$2.08	$1.99	$13.04	1,294	−$2.10	$2.13	$27.87	1,231	−$0.23	$1.48	$23.94	2,525
Spouse earnings 2016-18	$0.14	$0.51	$2.92	10,665	$1.23	$0.82	$3.34	6,521	$0.61	$0.46	$3.16	17,186
Spouse earnings 2016-18 (conditional on having a spouse)	$0.89	$3.74	$25.84	1,294	$9.47	$3.89	$14.80	1,231	$5.62	$2.73	$17.73	2,525
Parent income												
Parent(s) all govt. payments 2016-18	−$1.03	$0.83	$17.27	10,665	$0.29	$0.79	$12.51	6,521	−$0.47	$0.59	$14.51	17,186
Parent(s) all govt. payments 2016-18 (conditional on living with parent)	−$2.24	$1.25	$19.93	3,978	−$2.17	$1.72	$20.56	1,039	−$2.23	$1.04	$20.17	5,017
Parent(s) all govt. payments 2016-18 (0 if live away from DSP recipient)	−$1.39	$0.62	$8.79	10,665	−$0.58	$0.45	$4.04	6,521	−$1.04	$0.41	$6.03	17,186
Parent(s) earnings 2016-18	$5.27	$2.03	$19.48	10,665	−$0.58	$1.35	$10.90	6,521	$2.77	$1.30	$14.50	17,186
Parent(s) earnings 2016-18 (conditional on living with parent)	$10.03	$3.48	$19.49	3,978	$8.24	$3.33	$7.48	1,039	$9.60	$2.78	$14.91	5,017
Parent(s) earnings 2016-18 (0 if live away from DSP recipient)	$2.98	$1.47	$8.60	10,665	$1.21	$0.58	$1.47	6,521	$2.23	$0.88	$4.46	17,186
Family income												
Family member (parent/spouse) member earnings 2016-18	$3.12	$1.53	$11.51	10,665	$2.45	$0.98	$4.81	6,521	$2.83	$0.98	$7.62	17,186
Family member (parent/spouse) member earnings 2016-18 (conditional on living with family)	$8.03	$2.90	$21.59	5,154	$8.88	$2.68	$11.71	2,201	$8.32	$2.12	$16.49	7,355
Household all govt. payments (not including own DSP) 2016-18	$0.43	$0.75	$12.81	10,665	$0.22	$0.89	$13.78	6,521	$0.34	$0.58	$13.37	17,186
Household all govt. payments (not including own DSP) 2016-18 (conditional on living with family)	$0.08	$1.19	$22.43	5,154	−$0.96	$1.67	$29.65	2,201	−$0.28	$0.98	$26.16	7,355
Household earnings 2016-18	$4.48	$1.69	$17.30	10,665	$3.47	$1.17	$8.02	6,521	$4.05	$1.10	$11.91	17,186
Household earnings 2016-18 (conditional on living with family)	$10.84	$3.13	$27.93	5,154	$10.14	$2.98	$15.61	2,201	$10.60	$2.30	$21.57	7,355
Household income 2016-18	$1.63	$1.73	$55.41	10,665	$0.52	$1.35	$46.91	6,521	$1.15	$1.15	$50.48	17,186
Household income 2016-18 (conditional on living with family)	$6.86	$2.79	$74.73	5,154	$6.01	$2.64	$66.89	2,201	$6.57	$2.05	$70.69	7,355
Own health and health care use												
Prescriptions: Total value of mental drugs 2016-18	$0.16	$0.07	$0.41	10,455	$0.10	$0.08	$0.84	6,299	$0.14	$0.05	$0.66	16,754
Prescriptions: Any mental drug 2016-18	0.039	0.021	0.568	10,455	0.035	0.022	0.749	6,299	0.037	0.015	0.672	16,754
Prescriptions: Total value of antipsychotic drugs 2016-18	$0.17	$0.06	$0.28	10,455	$0.09	$0.07	$0.67	6,299	$0.14	$0.05	$0.51	16,754
Prescriptions: Any antipsychotic drug 2016-18	0.032	0.020	0.245	10,455	0.041	0.025	0.429	6,299	0.036	0.016	0.350	16,754
Prescriptions: Total value of all drugs 2016-18	$0.60	$0.29	$1.83	10,455	$0.26	$0.43	$3.33	6,299	$0.46	$0.25	$2.69	16,754
Prescriptions: Any drug 2016-18	0.002	0.013	0.880	10,455	0.016	0.012	0.931	6,299	0.008	0.009	0.909	16,754
Died 2015-19	0.000	0.006	0.020	10,665	0.012	0.008	0.031	6,521	0.005	0.005	0.026	17,186

Notes: Table presents RD estimates for the separate Start and Birth RDs (i.e., β_1 from equation (1) and β_2 from equation (2)) and RD estimates for the combined Start and Birth Date RDs (i.e., β_4 from equation (4)) when using all the variables in the covariate balance tables as controls. Dollar amounts are in 1000s of 2024 AUD. Start Date sample consists of DSP recipients who entered DSP within 15 months before and 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Birth Date sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Combined sample stacks the start date sample and the birth date sample.

Appendix Table A.20: RD estimates with many controls

	Combined		Birth		Start	
	Pt Est	Std Err	Pt Est	Std Err	Pt Est	Std Err
Own income						
Received medical review between 2014-16	0.590	0.023	0.719	0.035	0.532	0.029
Lost DSP between 2014-16	0.181	0.017	0.187	0.030	0.180	0.021
Own DSP payments 2016-18	−$4.60	$0.48	−$4.14	$0.89	−$4.87	$0.56
Own non-DSP payments 2016-18	$1.70	$0.39	$2.56	$0.79	$1.30	$0.44
Own Newstart payments 2016-18	$1.22	$0.15	$1.18	$0.31	$1.24	$0.16
Own all govt. payments 2016-18	−$2.90	$0.50	−$1.58	$0.93	−$3.57	$0.58
Own earnings 2016-18	$2.67	$0.71	$3.04	$1.10	$2.58	$0.88
Own income 2016-18	−$0.24	$0.64	$1.46	$1.10	−$0.99	$0.77
Spouse income						
Spouse all govt. payments 2016-18	$0.26	$0.34	−$0.12	$0.73	$0.49	$0.37
Spouse earnings 2016-18	$0.87	$0.68	$1.93	$1.52	$0.40	$0.66
Parent income						
Parent(s) all govt. payments 2016-18 (0 if live away from DSP recipient)	−$1.47	$0.57	−$1.80	$0.75	−$1.32	$0.75
Parent(s) earnings 2016-18 (0 if live away from DSP recipient)	$3.27	$1.74	$2.14	$1.75	$3.84	$2.38
Family income						
Family member (parent/spouse) member earnings 2016-18	$4.13	$1.87	$4.07	$2.32	$4.23	$2.46
Household all govt. payments (not including own DSP) 2016-18	$0.50	$0.74	$0.64	$1.21	$0.46	$0.92
Household income 2016-18	$2.69	$1.82	$3.61	$2.25	$2.41	$2.41
Own health and health care use						
Prescriptions: Total value of mental drugs 2016-18	−$0.05	$0.08	−$0.02	$0.15	−$0.06	$0.09
Prescriptions: Any mental drug 2016-18	0.024	0.025	−0.005	0.040	0.032	0.031
Prescriptions: Total value of antipsychotic drugs 2016-18	−$0.03	$0.08	$0.01	$0.15	−$0.04	$0.09
Prescriptions: Any antipsychotic drug 2016-18	−0.010	0.024	0.025	0.045	−0.028	0.028
Prescriptions: Total value of all drugs 2016-18	$0.78	$0.43	$0.75	$0.73	$0.79	$0.55
Prescriptions: Any drug 2016-18	−0.004	0.014	−0.023	0.019	0.005	0.018
Died 2015-19	−0.002	0.008	−0.002	0.016	−0.002	0.009

Notes: Table presents RD estimates for the separate Start and Birth RDs (i.e., β_1 from equation (1) and β_2 from equation (2)) and RD estimates for the combined Start and Birth Date RDs (i.e., β_4 from equation (4)) when using all the variables in the covariate balance table (Table A.2) as controls. Dollar amounts are in 1000s of 2024 AUD. Start Date sample consists of DSP recipients who entered DSP within 15 months before and 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Birth Date sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Combined sample stacks the start date sample and the birth date sample.

Appendix Table A.21: RD estimates using "rdrobust" package

	Combined				Birth				Start			
	Pt Est	Std Err	N: Left bandwidth	N: Right bandwidth	Pt Est	Std Err	N: Left bandwidth	N: Right bandwidth	Pt Est	Std Err	N: Left bandwidth	N: Right bandwidth
Own income												
Received medical review between 2014-16	0.565	0.012	8,223	19,079	0.714	0.012	13,400	9,621	0.527	0.041	1,539	2,077
Lost DSP between 2014-16	0.143	0.008	10,492	29,385	0.168	0.014	9,192	7,340	0.127	0.029	1,618	2,213
Own DSP payments 2016-18	−$3.28	$0.21	14,836	33,291	−$4.06	$0.36	13,836	9,841	−$2.60	$0.79	1,674	2,291
Own non-DSP payments 2016-18	$1.83	$0.21	10,996	30,970	$1.92	$0.35	11,504	8,698	$2.36	$0.74	1,551	2,078
Own Newstart payments 2016-18	$1.32	$0.06	12,556	31,962	$1.55	$0.12	9,958	7,814	$1.16	$0.22	1,995	2,726
Own all govt. payments 2016-18	−$1.28	$0.26	10,492	29,050	−$2.12	$0.37	14,749	10,288	−$0.33	$0.90	1,423	1,914
Own earnings 2016-18	$0.83	$0.28	15,031	33,418	$1.20	$0.44	11,504	8,698	−$0.65	$1.16	1,551	2,078
Own income 2016-18	−$0.76	$0.29	14,634	33,177	−$0.87	$0.50	10,750	8,240	−$0.83	$0.98	1,995	2,726
Spouse income												
Spouse all govt. payments 2016-18	$0.30	$0.25	11,175	31,090	−$0.12	$0.43	14,749	10,288	$0.19	$0.62	1,791	2,427
Spouse earnings 2016-18	$0.77	$0.32	11,883	31,535	$0.95	$0.56	12,762	9,228	$0.62	$1.15	1,574	2,134
Parent income												
Parent(s) all govt. payments 2016-18 (0 if live away from DSP recipient)	−$1.83	$0.40	7,881	17,254	−$0.40	$0.40	6,951	5,882	−$2.99	$1.42	1,411	1,887
Parent(s) earnings 2016-18 (0 if live away from DSP recipient)	−$0.13	$0.83	8,379	20,001	$1.24	$0.49	9,192	7,340	$2.64	$2.44	1,999	2,740
Family income												
Family member (parent/spouse) member earnings 2016-18	$0.30	$0.83	9,474	24,918	$2.09	$0.79	9,192	7,340	$3.41	$2.68	1,852	2,520
Household all govt. payments (not including own DSP) 2016-18	$0.67	$0.42	12,908	32,173	$1.04	$0.61	14,749	10,288	−$0.43	$1.48	1,821	2,472
Household income 2016-18	−$1.85	$1.01	9,015	22,434	$0.43	$1.05	9,580	7,491	−$0.23	$3.07	1,923	2,605
Own health												
Died 2015-19	0.002	0.003	15,438	33,640	0.000	0.006	16,946	11,226	0.007	0.011	2,041	2,832

Notes: Table presents "rdrobust" estimates, using the package developed by Calonico et al. (2018), for the Start Date RD, Birth Date RD, and combined Start and Birth RDs. Start Date point estimates and standard errors are estimates of β_1 from equation (1). Birth Date point estimates and standard errors are estimates of β_2 from equation (2). Combined point estimates and standard errors are estimates of β_4 from equation (4). Dollar amounts are in 1000s of 2024 AUD. The Start date sample consists of individuals who turned 35 after July 1, 2014 (since the change only applied to young people) and who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." The Birth Date sample consists of DSP recipients who entered DSP after January 1, 2008, and before January 1, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Combined sample stacks the Start date and Birth date samples. Point estimates and standard errors are the bias-corrected local-polynomial RD estimates given by "rdrobust." N is the full sample size of the data before bandwidths are selected by "rdrobust." "Left-bandwidth" and "Right-bandwidth" are the bandwidths to the left and right of the cutff that "rdrobust" uses to calculate the regression function.

Appendix Table A.22: RD estimates with polynomials

	Polynomial of order 1		Polynomial of order 2		Polynomial of order 3		Polynomial of order 4	
	Pt Est	Std Err	Pt Est	Std Err	Pt Est	Std Err	Pt Est	Std Err
Combined experiment (Own income)								
Received medical review between 2014-16	0.613	0.013	0.652	0.015	0.631	0.021	0.666	0.022
Lost DSP between 2014-16	0.151	0.011	0.146	0.013	0.144	0.018	0.145	0.019
Own DSP payments 2016-18	−$3.23	$0.32	−$2.93	$0.39	−$3.18	$0.52	−$3.14	$0.57
Own non-DSP payments 2016-18	$1.71	$0.27	$1.85	$0.35	$2.10	$0.47	$1.90	$0.52
Own Newstart payments 2016-18	$1.26	$0.09	$1.28	$0.12	$1.37	$0.17	$1.38	$0.18
Own all govt. payments 2016-18	−$1.52	$0.33	−$1.08	$0.42	−$1.08	$0.56	−$1.24	$0.61
Own earnings 2016-18	$1.22	$0.42	$0.45	$0.49	$0.62	$0.63	$0.78	$0.66
Own income 2016-18	−$0.30	$0.40	−$0.63	$0.50	−$0.45	$0.67	−$0.46	$0.72
Combined experiment (Spouse income)								
Spouse all govt. payments 2016-18	−$0.33	$0.34	−$0.71	$0.45	−$0.66	$0.61	−$0.89	$0.68
Spouse earnings 2016-18	$0.61	$0.46	$0.65	$0.60	$1.00	$0.85	$0.96	$0.93
Combined experiment (Parent income)								
Parent(s) all govt. payments 2016-18 (0 if live away from DSP recipient)	−$1.04	$0.41	−$0.74	$0.45	−$1.58	$0.61	−$1.46	$0.62
Parent(s) earnings 2016-18 (0 if live away from DSP recipient)	$2.23	$0.88	$1.54	$0.86	$1.76	$1.08	$0.89	$1.02
Combined experiment (Family income)								
Family member (parent/spouse) member earnings 2016-18	$2.84	$0.98	$2.19	$1.03	$2.76	$1.35	$1.86	$1.36
Household income 2016-18	$1.17	$1.15	$0.10	$1.27	$0.06	$1.67	−$0.96	$1.73
Combined experiment (Own health)								
Prescriptions: Total value of mental drugs 2016-18	$0.14	$0.05	$0.14	$0.06	$0.16	$0.08	$0.15	$0.09
Prescriptions: Any mental drug 2016-18	0.037	0.015	0.023	0.018	0.022	0.025	0.031	0.026
Prescriptions: Total value of antipsychotic drugs 2016-18	$0.14	$0.05	$0.14	$0.06	$0.16	$0.08	$0.14	$0.09
Prescriptions: Any antipsychotic drug 2016-18	0.036	0.016	0.043	0.020	0.033	0.026	0.038	0.028
Prescriptions: Total value of all drugs 2016-18	$0.46	$0.25	$0.30	$0.32	$0.47	$0.42	$0.47	$0.45
Prescriptions: Any drug 2016-18	0.008	0.009	0.013	0.011	0.008	0.014	0.019	0.015
Died 2015-19	0.005	0.005	0.010	0.006	0.013	0.009	0.017	0.009
Birth experiment (Own income)								
Received medical review between 2014-16	0.709	0.017	0.709	0.017	0.707	0.023	0.707	0.023
Lost DSP between 2014-16	0.157	0.017	0.157	0.017	0.148	0.022	0.148	0.023
Own DSP payments 2016-18	−$3.16	$0.51	−$3.16	$0.51	−$3.28	$0.68	−$3.27	$0.68
Own non-DSP payments 2016-18	$1.93	$0.45	$1.93	$0.45	$1.92	$0.61	$1.90	$0.61
Own Newstart payments 2016-18	$1.35	$0.16	$1.34	$0.17	$1.45	$0.22	$1.45	$0.22
Own all govt. payments 2016-18	−$1.23	$0.54	−$1.23	$0.54	−$1.36	$0.71	−$1.37	$0.72
Own earnings 2016-18	$1.03	$0.57	$1.04	$0.58	$1.04	$0.74	$1.04	$0.74
Own income 2016-18	−$0.20	$0.63	−$0.20	$0.63	−$0.32	$0.84	−$0.33	$0.84
Birth experiment (Spouse income)								
Spouse all govt. payments 2016-18	−$1.13	$0.64	−$1.13	$0.64	−$1.20	$0.87	−$1.20	$0.87
Spouse earnings 2016-18	$1.24	$0.82	$1.24	$0.82	$1.08	$1.14	$1.09	$1.14
Birth experiment (Parent income)								
Parent(s) all govt. payments 2016-18 (0 if live away from DSP recipient)	−$0.58	$0.45	−$0.58	$0.45	−$0.68	$0.61	−$0.68	$0.61
Parent(s) earnings 2016-18 (0 if live away from DSP recipient)	$1.23	$0.58	$1.23	$0.58	$0.57	$0.78	$0.54	$0.78
Birth experiment (Family income)								
Family member (parent/spouse) member earnings 2016-18	$2.47	$0.99	$2.48	$0.99	$1.64	$1.35	$1.63	$1.36
Household income 2016-18	$0.56	$1.36	$0.58	$1.36	−$0.56	$1.81	−$0.58	$1.82
Birth experiment (Own health)								
Prescriptions: Total value of mental drugs 2016-18	$0.11	$0.08	$0.11	$0.08	$0.05	$0.10	$0.05	$0.10
Prescriptions: Any mental drug 2016-18	0.035	0.022	0.035	0.022	0.017	0.029	0.018	0.029
Prescriptions: Total value of antipsychotic drugs 2016-18	$0.09	$0.07	$0.10	$0.07	$0.05	$0.10	$0.05	$0.10
Prescriptions: Any antipsychotic drug 2016-18	0.041	0.025	0.041	0.025	0.016	0.033	0.016	0.033
Prescriptions: Total value of all drugs 2016-18	$0.26	$0.43	$0.26	$0.43	$0.33	$0.56	$0.32	$0.56
Prescriptions: Any drug 2016-18	0.016	0.012	0.015	0.012	0.013	0.016	0.014	0.016
Died 2015-19	0.012	0.008	0.012	0.008	0.015	0.011	0.015	0.011
Start experiment (Own income)								
Received medical review between 2014-16	0.541	0.018	0.551	0.029	0.486	0.040	0.536	0.051
Lost DSP between 2014-16	0.147	0.014	0.127	0.021	0.137	0.028	0.138	0.036
Own DSP payments 2016-18	−$3.28	$0.39	−$2.53	$0.60	−$2.99	$0.80	−$2.74	$1.01
Own non-DSP payments 2016-18	$1.54	$0.32	$1.72	$0.51	$2.46	$0.73	$1.92	$0.93
Own Newstart payments 2016-18	$1.19	$0.10	$1.17	$0.16	$1.22	$0.22	$1.15	$0.29
Own all govt. payments 2016-18	−$1.73	$0.42	−$0.81	$0.64	−$0.53	$0.88	−$0.82	$1.11
Own earnings 2016-18	$1.36	$0.58	−$0.61	$0.88	−$0.17	$1.20	−$0.04	$1.50
Own income 2016-18	−$0.38	$0.51	−$1.42	$0.79	−$0.71	$1.10	−$0.86	$1.41
Start experiment (Spouse income)								
Spouse all govt. payments 2016-18	$0.27	$0.34	$0.04	$0.50	$0.37	$0.66	$0.08	$0.80
Spouse earnings 2016-18	$0.14	$0.51	−$0.41	$0.80	$0.84	$1.15	$0.57	$1.49
Start experiment (Parent income)								
Parent(s) all govt. payments 2016-18 (0 if live away from DSP recipient)	−$1.39	$0.62	−$1.04	$0.98	−$3.31	$1.36	−$3.92	$1.74
Parent(s) earnings 2016-18 (0 if live away from DSP recipient)	$2.98	$1.47	$2.08	$2.15	$4.06	$2.77	$1.99	$3.42
Start experiment (Family income)								
Family member (parent/spouse) member earnings 2016-18	$3.12	$1.53	$1.67	$2.25	$4.90	$2.94	$2.56	$3.65
Household income 2016-18	$1.63	$1.73	−$0.75	$2.58	$1.25	$3.42	−$2.14	$4.28
Start experiment (Own health)								
Prescriptions: Total value of mental drugs 2016-18	$0.16	$0.07	$0.21	$0.10	$0.37	$0.14	$0.47	$0.17
Prescriptions: Any mental drug 2016-18	0.039	0.021	0.001	0.033	0.031	0.045	0.072	0.058
Prescriptions: Total value of antipsychotic drugs 2016-18	$0.17	$0.06	$0.21	$0.10	$0.36	$0.13	$0.45	$0.17
Prescriptions: Any antipsychotic drug 2016-18	0.032	0.020	0.046	0.031	0.064	0.042	0.104	0.054
Prescriptions: Total value of all drugs 2016-18	$0.60	$0.29	$0.38	$0.45	$0.72	$0.57	$0.93	$0.65
Prescriptions: Any drug 2016-18	0.002	0.013	0.008	0.020	−0.001	0.027	0.035	0.035
Died 2015-19	0.000	0.006	0.007	0.009	0.009	0.012	0.021	0.013

Notes: Table presents RD estimates for the Combined, Start Date RD, and Birth Date RD samples with linear, quadratic, cubic and quartic running variables. Dollar amounts are in 1000s of 2024 AUD. Start Date sample consists of DSP recipients who entered DSP within 15 months before and 18 months after January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Birth Date sample consists of DSP recipients with a 35th birthday within a 24-month bandwidth around July 1, 2014, who entered DSP after January 1, 2008, and before January, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Combined sample stacks Birth Date and Start Date samples.

Appendix Table A.23: RD estimates with different bandwidths

	Bandwidth: 2 months		Bandwidth: 5 months		Bandwidth: 10 months		Bandwidth: 15 months		Bandwidth: 25 months	
	Pt Est	Std Err	Pt Est	Std Err	Pt Est	Std Err	Pt Est	Std Err	Pt Est	Std Err
Combined experiment (Own income)										
Received medical review between 2014-16	0.504	0.022	0.547	0.018	0.585	0.015	0.588	0.014	0.566	0.013
Lost DSP between 2014-16	0.124	0.015	0.143	0.012	0.143	0.010	0.149	0.010	0.155	0.009
Own DSP payments 2016-18	−$2.63	$0.46	−$3.15	$0.38	−$3.07	$0.32	−$3.21	$0.29	−$3.28	$0.28
Own non-DSP payments 2016-18	$1.74	$0.43	$1.58	$0.33	$1.66	$0.29	$1.52	$0.26	$1.64	$0.24
Own Newstart payments 2016-18	$1.14	$0.12	$1.24	$0.09	$1.23	$0.08	$1.24	$0.07	$1.25	$0.07
Own all govt. payments 2016-18	−$0.89	$0.53	−$1.57	$0.43	−$1.41	$0.36	−$1.69	$0.33	−$1.64	$0.30
Own earnings 2016-18	$0.32	$0.65	$0.55	$0.52	$0.76	$0.43	$1.30	$0.40	$1.43	$0.37
Own income 2016-18	−$0.57	$0.66	−$1.02	$0.53	−$0.65	$0.44	−$0.39	$0.40	−$0.21	$0.37
Combined experiment (Spouse income)										
Spouse all govt. payments 2016-18	−$0.33	$0.56	−$0.10	$0.47	−$0.45	$0.38	−$0.34	$0.34	−$0.14	$0.31
Spouse earnings 2016-18	$0.65	$0.73	$0.84	$0.59	$0.42	$0.51	$0.47	$0.45	$0.47	$0.41
Combined experiment (Parent income)										
Parent(s) all govt. payments 2016-18 (0 if live away from DSP recipient)	−$2.47	$0.64	−$1.72	$0.49	−$1.02	$0.44	−$0.73	$0.40	−$0.99	$0.37
Parent(s) earnings 2016-18 (0 if live away from DSP recipient)	$0.99	$1.19	$1.06	$1.06	$1.72	$0.89	$2.57	$0.85	$2.05	$0.80
Combined experiment (Family income)										
Family member (parent/spouse) member earnings 2016-18	$1.64	$1.37	$1.90	$1.19	$2.15	$1.01	$3.03	$0.95	$2.52	$0.89
Household all govt. payments (not including own DSP) 2016-18	−$1.07	$0.92	−$0.24	$0.74	$0.18	$0.63	$0.46	$0.57	$0.51	$0.53
Household income 2016-18	−$1.74	$1.68	−$0.94	$1.43	$0.02	$1.21	$1.58	$1.12	$1.18	$1.05
Combined experiment (Own health)										
Prescriptions: Total value of mental drugs 2016-18	$0.17	$0.08	$0.19	$0.07	$0.17	$0.06	$0.12	$0.05	$0.12	$0.05
Prescriptions: Any mental drug 2016-18	0.020	0.025	0.034	0.020	0.019	0.017	0.021	0.015	0.028	0.014
Prescriptions: Total value of antipsychotic drugs 2016-18	$0.16	$0.08	$0.18	$0.07	$0.17	$0.06	$0.12	$0.05	$0.12	$0.04
Prescriptions: Any antipsychotic drug 2016-18	0.050	0.025	0.060	0.021	0.044	0.017	0.030	0.015	0.035	0.014
Prescriptions: Total value of all drugs 2016-18	$0.54	$0.38	$0.51	$0.31	$0.39	$0.26	$0.38	$0.23	$0.41	$0.22
Prescriptions: Any drug 2016-18	−0.007	0.015	0.000	0.012	0.000	0.010	−0.001	0.009	0.005	0.008
Died 2015-19	0.015	0.008	0.015	0.007	0.006	0.006	0.004	0.005	0.002	0.005
Birth experiment (Own income)										
Received medical review between 2014-16	0.594	0.067	0.582	0.038	0.629	0.027	0.631	0.022	0.655	0.018
Lost DSP between 2014-16	0.141	0.054	0.146	0.032	0.144	0.023	0.133	0.019	0.148	0.015
Own DSP payments 2016-18	−$4.11	$1.83	−$2.76	$1.02	−$3.20	$0.72	−$2.94	$0.59	−$2.96	$0.47
Own non-DSP payments 2016-18	$0.24	$1.90	$2.55	$1.00	$2.18	$0.68	$1.55	$0.54	$1.68	$0.43
Own Newstart payments 2016-18	$1.02	$0.32	$1.34	$0.25	$1.47	$0.20	$1.26	$0.17	$1.26	$0.14
Own all govt. payments 2016-18	−$3.87	$2.28	−$0.21	$1.18	−$1.02	$0.81	−$1.38	$0.65	−$1.27	$0.51
Own earnings 2016-18	$2.34	$1.97	$0.69	$1.13	$1.14	$0.85	$0.89	$0.68	$1.13	$0.55
Own income 2016-18	−$1.54	$2.49	$0.47	$1.34	$0.12	$0.98	−$0.49	$0.77	−$0.14	$0.61
Birth experiment (Spouse income)										
Spouse all govt. payments 2016-18	−$0.16	$2.71	−$1.82	$1.43	−$2.08	$0.98	−$1.29	$0.80	−$1.26	$0.62
Spouse earnings 2016-18	−$3.12	$3.49	$0.68	$1.87	$1.65	$1.21	$0.73	$0.97	$1.02	$0.76
Birth experiment (Parent income)										
Parent(s) all govt. payments 2016-18 (0 if live away from DSP recipient)	$0.23	$1.99	−$1.92	$1.03	−$1.22	$0.70	−$0.98	$0.55	−$0.74	$0.43
Parent(s) earnings 2016-18 (0 if live away from DSP recipient)	$1.19	$2.32	$1.22	$1.28	$0.52	$0.87	$0.81	$0.71	$1.12	$0.58
Birth experiment (Family income)										
Family member (parent/spouse) member earnings 2016-18	−$1.94	$4.12	$1.91	$2.23	$2.18	$1.47	$1.54	$1.18	$2.14	$0.95
Household all govt. payments (not including own DSP) 2016-18	$0.31	$3.70	−$1.18	$1.96	−$1.12	$1.34	−$0.71	$1.10	−$0.31	$0.85
Household income 2016-18	−$3.40	$5.39	−$1.35	$2.94	−$1.01	$2.01	−$1.22	$1.63	$0.01	$1.30
Birth experiment (Own health)										
Prescriptions: Total value of mental drugs 2016-18	−$0.65	$0.35	−$0.23	$0.18	−$0.05	$0.12	$0.13	$0.10	$0.15	$0.08
Prescriptions: Any mental drug 2016-18	−0.003	0.090	0.003	0.048	0.010	0.033	0.013	0.027	0.031	0.021
Prescriptions: Total value of antipsychotic drugs 2016-18	−$0.71	$0.34	−$0.21	$0.17	−$0.05	$0.12	$0.13	$0.09	$0.14	$0.07
Prescriptions: Any antipsychotic drug 2016-18	−0.012	0.102	−0.019	0.054	0.001	0.038	0.033	0.031	0.059	0.024
Prescriptions: Total value of all drugs 2016-18	$0.06	$1.71	−$0.20	$0.88	$0.05	$0.62	$0.37	$0.52	$0.27	$0.41
Prescriptions: Any drug 2016-18	−0.041	0.052	0.003	0.028	0.009	0.019	0.005	0.015	0.009	0.012
Died 2015-19	0.022	0.027	0.012	0.016	0.027	0.012	0.012	0.010	0.013	0.008
Start experiment (Own income)										
Received medical review between 2014-16	0.421	0.060	0.419	0.035	0.452	0.024	0.457	0.020	0.495	0.018
Lost DSP between 2014-16	0.108	0.037	0.112	0.023	0.117	0.016	0.123	0.013	0.157	0.011
Own DSP payments 2016-18	−$2.55	$1.05	−$2.29	$0.66	−$2.53	$0.47	−$2.82	$0.39	−$3.48	$0.34
Own non-DSP payments 2016-18	$1.58	$1.00	$2.25	$0.60	$1.30	$0.40	$1.29	$0.32	$1.60	$0.28
Own Newstart payments 2016-18	$1.11	$0.27	$1.04	$0.17	$1.03	$0.12	$1.03	$0.10	$1.23	$0.08
Own all govt. payments 2016-18	−$0.97	$1.18	−$0.05	$0.73	−$1.22	$0.51	−$1.54	$0.42	−$1.88	$0.38
Own earnings 2016-18	−$1.24	$1.63	−$0.24	$0.98	$0.06	$0.69	$0.85	$0.58	$1.60	$0.52
Own income 2016-18	−$2.21	$1.55	−$0.29	$0.90	−$1.17	$0.62	−$0.69	$0.52	−$0.27	$0.47
Start experiment (Spouse income)										
Spouse all govt. payments 2016-18	$1.70	$0.87	$1.06	$0.62	$0.72	$0.43	$0.62	$0.37	$0.60	$0.33
Spouse earnings 2016-18	−$0.52	$1.67	$0.46	$0.95	−$0.47	$0.62	$0.13	$0.52	$0.07	$0.46
Start experiment (Parent income)										
Parent(s) all govt. payments 2016-18 (0 if live away from DSP recipient)	−$4.67	$1.94	−$3.26	$1.13	−$1.70	$0.76	−$1.62	$0.62	−$1.24	$0.56
Parent(s) earnings 2016-18 (0 if live away from DSP recipient)	$0.86	$3.52	$2.16	$2.37	$1.16	$1.71	$1.48	$1.46	$2.48	$1.29
Start experiment (Family income)										
Family member (parent/spouse) member earnings 2016-18	$0.34	$3.81	$2.62	$2.50	$0.70	$1.79	$1.61	$1.52	$2.56	$1.34
Household all govt. payments (not including own DSP) 2016-18	−$1.40	$2.26	$0.04	$1.37	$0.32	$0.93	$0.29	$0.76	$0.97	$0.69
Household income 2016-18	−$4.85	$4.52	$0.12	$2.89	−$1.45	$2.05	−$0.07	$1.72	$1.65	$1.53
Start experiment (Own health)										
Prescriptions: Total value of mental drugs 2016-18	$0.59	$0.17	$0.38	$0.11	$0.20	$0.08	$0.20	$0.07	$0.11	$0.06
Prescriptions: Any mental drug 2016-18	0.131	0.064	0.049	0.038	0.013	0.026	0.049	0.021	0.023	0.019
Prescriptions: Total value of antipsychotic drugs 2016-18	$0.57	$0.17	$0.35	$0.11	$0.21	$0.08	$0.21	$0.07	$0.13	$0.06
Prescriptions: Any antipsychotic drug 2016-18	0.156	0.059	0.067	0.036	0.048	0.025	0.056	0.020	0.023	0.018
Prescriptions: Total value of all drugs 2016-18	$0.51	$0.70	$0.70	$0.53	$0.60	$0.37	$0.68	$0.30	$0.50	$0.26
Prescriptions: Any drug 2016-18	0.055	0.040	0.015	0.023	−0.001	0.015	0.002	0.013	0.001	0.011
Died 2015-19	0.024	0.012	0.004	0.011	0.004	0.008	0.004	0.006	−0.005	0.006

Notes: Table presents RD estimates for the Combined, Start Date RD, and Birth Date RD samples using different bandwidths. Dollar amounts are in 1000s of 2024 AUD. Start Date sample consists of DSP recipients who entered DSP within the number of months specified bat the top of the column around January 1, 2008, who turned 35 after July 1, 2014, who were still receiving DSP benefits on July 1, 2014, and who who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Birth Date sample consists of DSP recipients with a 35th birthday within the number of months specified at the top of the column around around July 1, 2014, who entered DSP after January 1, 2008, and before January, 2012, who were still receiving DSP benefits on July 1, 2014, and who were deemed neither "manifestly disabled" nor "0/missing hours of work capacity with intervention" nor missing "impairment rating." Combined sample stacks Birth Date and Start Date samples.

Appendix Table A.24: Welfare and adjustment terms

	Lives with family	Lives alone	Whole sample
Model with all adjustment terms - Welfare terms			
First Order	$12,422	$20,483	$16,075
Behavioral	−$7,771	−$4,267	−$4,496
Net Private	$4,651	$16,216	$11,578
Govt Rev	$17,019	$6,486	$11,019
Model with all adjustment terms - First order terms			
$\frac{dD}{dD}dD$: DSP change	$21,918	$21,777	$21,233
$-\sigma pdD$: prescription disincentive	−$1,013	−$1,318	−$1,141
$-\delta bdD$: mechanical govt. benefits	−$679	−$415	−$522
$-\alpha fdD$: mechanical family earnings	−$7,805	$0	−$3,496
Model with all adjustment terms - Adjustment terms			
$\left(\frac{dc}{dD}dD\right)^2$	$0	−$438	$0
$\frac{dc}{dD}dD\frac{dh}{dD}dD$	$0	$378	$0
$\frac{dh}{dD}dD\frac{dp}{dD}dD$	$349	$252	$403
$\frac{db}{dD}dD\frac{dp}{dD}dD$	$196	$903	$512
$\frac{dc}{dD}dD\frac{dp}{dD}dD$	$0	$0	$0
$\left(\frac{dp}{dD}dD\right)^2$	−$3	−$5	−$6
$\frac{dp}{dD}dD$	$103	$275	$196
$\frac{db}{dD}dD\frac{dc}{dD}dD$	$0	$1,252	$0
$\frac{db}{dD}dD$	$693	$1,211	$905
$\frac{dc}{dD}dD\frac{df}{dD}dD$	$0	$0	$0
$\frac{df}{dD}dD\frac{dp}{dD}dD$	$60	$0	$41
$\frac{df}{dD}dD$	$6,372	$0	$2,445
Model with all adjustment terms - Government revenue terms			
$\frac{dD}{dD}dD$: DSP change	$21,918	$21,777	$21,233
$\frac{dB}{dD}dD$	−$8,584	−$14,314	−$11,182
$\frac{dP}{dD}dD$	−$226	−$1,365	−$875
Higher wage rate from Rx	$14	$22	$21
Hours worked	$1,205	$366	$756
$\frac{df}{dD}dD$	$2,692	$0	$1,066
Model with only work adjustment - Welfare terms			
First Order	$25,389	$29,820	$27,578
Behavioral	−$3,816	−$1,683	−$3,155
Net Private	$21,573	$28,137	$24,423
Govt Rev	$20,713	$21,411	$20,478
Model with only work adjustment - First order terms			
$\frac{dD}{dD}dD$: DSP change	$21,918	$21,777	$21,233
Model with only work adjustment - Adjustment terms			
$\left(\frac{dc}{dD}dD\right)^2$	−$3,471	−$8,044	−$6,344
$\frac{dc}{dD}dD\frac{dh}{dD}dD$	$3,816	$1,683	$3,155

Notes: Table shows welfare and adjustment terms for the main model specification. First order terms equal DSP change (dD) plus the second order co nsumption term. For the model with only work adjustment, we calculate the change in consumption using only the earnings response and the change in DSP. We impose a consumption floor of $15,000 2024 AUD. Whole sample welfare terms also set $\frac{dc}{dD}$ to 0.

B Data and empirical appendix

B.1 Identification of DSP spells and medical review matching procedure

Since we study a reform that occurs in July 2014, our sample includes all individuals receiving DSP benefits in July 2014. To create the running variable for the "Start Date" reform, we need to know when the current DSP spell started. We therefore must determine what constitutes a single DSP spell. In the data, we observe that DSP episodes end either with a suspension or a cancellation. Suspensions occur for a number of reasons, including entering the criminal justice system, moving temporarily abroad or working temporarily above the 29-hour week limit. Individuals returning from a suspension do not need to go through the normal application process and usually do not face another medical review.[24] For this reason, we combine DSP episodes that end in suspension with their succeeding episodes into a single DSP spell. The start date of episodes that follow a suspension is therefore the start date of the previous episode that ended in a suspension. Since individuals who have their DSP cancelled have to go through the normal application process, we do not combine cancelled episodes with their succeeding episode. This data cleaning process leaves us with 828,354 current DSP recipients in July 2014.

Since the policy change we study is about medical reviews, it is important for us to link DSP spells to the relevant initial medical review (upon application) and any continuing medical reviews (during DSP receipt). Centrelink has one database for all medical reviews that are conducted for any Centrelink program; this includes DSP but also includes other programs such as Sickness Allowance. Each medical review record has a start date and, in some cases, a medical review reason code that identifies the program for which the review was conducted. We match DSP spells to initial medical reviews in two steps. In the first step, we take the first 15 medical reviews with either a DSP or missing review reason. We match each DSP spell with the medical review that has a start date closest to the spell start date, restricting to medical reviews whose start date is within 100 days of the DSP spell start date. We match 96.5% of spells in our sample in this step. For the remaining 3.5% of spells that are unmatched, we match the closest medical review (from any program) from the two years before an individual's DSP start. This matches another 1.6% of spells. The remaining 1.9% of DSP start dates remain unmatched to a medical review. Among DSP start dates that are matched to a medical review, in more than 90% of cases the medical review is the same date as the DSP start date.

One component of the medical review is the assessed "work capacity" of an individual. Work capacity is particularly important for our study because DSP recipients who are as-

[24]For example, see the Disability support pension section here `https://guides.dss.gov.au/social-security-guide/8/2/2`.

sessed to have zero "work capacity with intervention" are exempt from medical reviews. Work capacity ratings are valid for two years no matter which program they were originally used for.[25] Work capacity is sometimes missing in the medical review that matches to a DSP spell because the work capacity assessment occurred in a previous medical review. In our sample, before conditioning on any medical review related variables, just over 20% of DSP spells are missing "work capacity" after the matching process described above. To address this, we carry forward work capacity for a maximum of two years before the DSP start date. This means that for a given DSP spell, the work capacity variable sometimes comes from a different medical review than the primary medical review to which the spell is matched. After carrying forward work capacity assessments from previous medical reviews, the proportion of our sample with missing work capacity falls to around 15%.

B.2 Direct effects of medical reviews

We present our main results as IV estimates of the effect of DSP loss on income and health care utilization in 2016–18, well after medical reviews have ended. However, it is possible that the medical reviews themselves have direct (and possibly persistent) effects on outcomes, especially on health care utilization. In Appendix Figure A.11, we plot RD estimates (rather than IV estimates) by quarter on key outcomes to assess the timing of health care outcomes relative to the time of the medical review and DSP loss. Since our data contain medical review end dates but not medical review start dates, we approximate the timing of when DSP recipients would have been notified about a medical review by shifting the medical review end date line two quarters ahead. RD estimates of DSP loss spike about one quarter after the spike in medical review end. On top of the medical review and DSP loss plots, we overlay quarterly RD estimates of the effect on GP visits and mental health prescription spending. Effects on GP visits spike at the time of the medical review. Effects on mental health drug spending also increase at the time of the medical review and remain elevated for several years after that.

Clearly, medical reviews have direct effects on GP visits and mental health drug prescriptions, since these effects show up before DSP loss. This raises the question: are the long-term effects on health care utilization that we estimate the direct (and persistent) effects of the medical review, or are they the effects of DSP loss? To answer this question, we predict the likelihood of DSP removal for our sample, using the rich set of covariates available to us.[26] Since DSP removal rates are around 20%, we cut the predicted removal probability at the 75th percentile.

In Appendix Figure A.12, we plot the same graph of quarterly RD estimates for the

[25] See, e.g., `servicesaustralia.gov.au/if-you-have-reduced-capacity-to-work?context=22276`.

[26] The R-squared on the prediction regression is 0.13, which is relatively high given that the outcome is a binary variable.

low removal probability group (top panel) and the high removal probability group (bottom panel). For the low removal probability group, we see that RD estimates for GP visits and mental health prescriptions spike at the time of the medical reviews but then attenuate after medical reviews are complete. In contrast, for the high removal probability group, RD estimates of mental health prescription spending (also psychiatric visits) remain elevated for several years after the medical reviews are completed. These results suggest that although medical reviews do have direct effects on health care utilization, they cannot explain the persistent long-term effects on these outcomes. DSP loss itself is likely responsible for long-term effects on medical visits and mental health prescription drugs.

What explains the direct effect of medical reviews on mental health prescriptions? We consider three possible explanations. First, increases in GP visits due to the medical review could create mechanical increases in mental health drug prescriptions if every GP visit has some probability of resulting in a mental health drug prescription. However, this seems unlikely because GP visits are extremely frequent in this population (median 5 per year). Moreover, there is an increase in mental health drug prescriptions even conditional on visiting a GP. Second, the increase in mental health drug prescriptions might reflect strategic behavior on the part of DSP recipients. If DSP recipients think having a mental health drug prescription will signal that their condition is severe, they might seek out such prescriptions at the time of the medical review. While we do not have direct evidence on this channel, it is perhaps unlikely given that even people with a low likelihood of removal (who should be less concerned about being removed) increase their use of mental health drugs. A third possibility is that medical reviews increase stress and exacerbate mental health symptoms, and that the mental health drugs treat these symptoms.

C Welfare derivations

C.1 Showing that behavioral responses are a function of preferences

We show that household behavioral responses are functions of parameters that we intuitively think should matter, like the relative disincentive on drugs and the relative marginal (dis)utilities of consumption, own work, drugs, and family work. The easiest way to see this is to focus on one channel at a time and shut down other channels. Here we work through two examples:

1. **Income effect channel**. Suppose we shut down the drug disincentive ($\sigma(p) = 0$). For simplicity, also shut down family earnings (i.e., $f = 0$, $y(f) = 0$) and other government benefits (i.e., $b = 0$, $s(b) = 0$). Also assume $\tau = 0$ and $\frac{dc}{dD} = 0$. If we use the expressions above to solve for the behavioral responses, we get that the work and drug responses are functions of the marginal disutilities of work/drugs relative to the marginal utility of consumption:

$$\frac{dh}{dD} = -\frac{(1+\kappa p_0)u'(c_0)}{v'(h_0)}\left(1+\frac{db}{dD}\right)\beta_h$$
$$\frac{dp}{dD} = -\frac{(1+\kappa p_0)u'(c_0)}{z'(p_0)}\left(1+\frac{db}{dD}\right)\beta_p$$

where

$$0 \leq \beta_h \equiv \frac{z''(p_0)w(p_0) - \kappa u'(c_0)w'(p_0)h_0w(p_0) - (1+\kappa p_0)u'(c_0)w''(p_0)h_0w(p_0)}{z''(p_0)w(p_0) - \kappa u'(c_0)w'(p_0)h_0w(p_0) - (1+\kappa p_0)u'(c_0)w''(p_0)h_0w(p_0) + (1+\kappa p_0)u'(c_0)(w'(p_0))^2h_0} \leq 1$$
$$0 \leq \beta_p \equiv \frac{(1+\kappa p_0)u'(c_0)(w'(p_0))^2h_0}{z''(p_0)w(p_0) - \kappa u'(c_0)w'(p_0)h_0w(p_0) - (1+\kappa p_0)u'(c_0)w''(p_0)h_0w(p_0) + (1+\kappa p_0)u'(c_0)(w'(p_0))^2h_0} \leq 1$$

The work response is larger when the marginal disutility of work is small relative to the marginal utility of consumption. The prescription drug response is larger when the marginal disutility of drugs is small relative to the marginal utility of consumption.

If we allow for a family earnings response (i.e., $f \neq 0$, $y(f) \neq 0$) or other government benefit response (i.e., $b \neq 0$, $s(b) \neq 0$), we get similar expressions but smaller work and drug responses since households have another margin of adjustment.

Derivation Setting $f = 0$, $\sigma(p) = 0$, $b = 0$, $\frac{dc}{dD} = 0$, $\tau = 0$ and $\eta = 0$ we get the following first order conditions:

$$
\begin{aligned}
v'(h) =& (1+\kappa p)u'(c)w(p) \\
z'(p) =& \kappa u(c) + (1+\kappa p)u'(c)w'(p)h \\
c =& w(p)h + D
\end{aligned} \tag{17}
$$

Implicitly differentiating these and the budget constraint we get:

$$
\begin{aligned}
v''(h)\frac{dh}{dD} =& \frac{dp}{dD}\left((1+\kappa p)u'(c)w'(p) + \kappa p u'(c)w(p)\right) \\
z''(p)\frac{dp}{dD} =& \frac{dp}{dD}\left(\kappa u'(c)w'(p)h + (1+\kappa p)u'(c)w''(p)h\right) + \frac{dh}{dD}(1+\kappa p)u'(c)w'(p) \\
0 =& \frac{dp}{dD}w'(p)h + \frac{dh}{dD}w(p) + 1 \\
\implies \frac{dp}{dD} =& \frac{(1+\kappa p)u'(c)w'(p)}{z''(p) - \kappa u'(c)w'(p)h - (1+\kappa p)u'(c)w''(p)h}\frac{dh}{dD} \\
\implies \frac{dh}{dD} =& \frac{1}{w(p)}\frac{\left(z''(p) - \kappa u'(c)w'(p)h - (1+\kappa p)u''(c)w''(p)h\right)w(p)}{(1+\kappa p)u''(c)(w'(p))^2 + z''(p)w(p) - \kappa u'(c)w(p)w'(p)h - (w+\kappa p)u'(c)w(p)w''(p)h} \\
\frac{dh}{dD} =& -\frac{(1+\kappa p)u'(c)}{v'(h)}\alpha_h
\end{aligned} \tag{18}
$$

where $\alpha_h = \frac{(z''(p) - \kappa u'(c)w'(p)h - (1+\kappa p)u''(c)w''(p)h)w(p)}{(1+\kappa p)u''(c)(w'(p))^2 + z''(p)w(p) - \kappa u'(c)w(p)w'(p)h - (w+\kappa p)u'(c)w(p)w''(p)h}$.

2. **Drug disincentive channel**. Suppose instead we shut down the disutility from taking drugs (i.e., $z(p) = 0$). For simplicity, also shut down family earnings (i.e., $f = 0$, $y(f) = 0$) and other government benefits (i.e., $b = 0$, $s(b) = 0$). Also assume $\tau = 0$ and $\frac{dc}{dD} = 0$. Then the work response reflects the relative drug disincentive effect (i.e., DSP tax $\sigma'(p)$ relative to wage subsidy $w'(p)$):

$$
\frac{dh}{dD} = \underbrace{\frac{\sigma'(p_0)}{w'(p_0)}}_{\text{Relative drug disincentive}} \underbrace{- \frac{w''(p)}{w'(p)}\left(\frac{v''(h)\sigma'(p)}{u'(c)(w'(p)^2 + v''(h)w''(p)h}\right)h}_{\text{Second-order wage effect}}
$$

Derivation Let $z(p) = 0$. The FOCs are:

$$
\begin{aligned}
0 =& u'(c)(w'(p)h - D\sigma'(p)) \\
\implies w'(p)h =& D\sigma'(p) \\
v'(h) =& u'(c)w(p)
\end{aligned} \tag{19}
$$

Implicitly differentiating these and the budget constraint we get:

$$
\begin{aligned}
0 =& w'(p)\frac{dh}{dD} + w''(p)h\frac{dp}{dD} - \sigma'(p) \\
v''(h)\frac{dh}{dD} =& u'(c)w'(p)\frac{dp}{dD} \\
\implies \frac{u'(c)w'(p)}{v''(h)}\frac{dp}{dD} =& \frac{\sigma'(p) - w''(p)h\frac{dp}{dD}}{w'(p)} \\
\sigma'(p) - w''(p)h\frac{dp}{dD} =& \frac{u'(c)(w'(p))^2}{v''(h)}\frac{dp}{dD}
\end{aligned} \tag{20}
$$

$$
\begin{aligned}
\frac{dp}{dD} =& \frac{v''(h)\sigma'(p)}{u'(c)(w'(p))^2 + v''(h)w''(p)h} \\
\frac{dh}{dD} =& \frac{\sigma'(p)}{w'(p)} - \frac{w''(p)}{w'(p)}\frac{v''(h)\sigma'(p)}{u'(c)(w'(p))^2 + v''(h)w''(p)h}
\end{aligned}
$$

C.2 Determining the change in household welfare

Taking a Taylor expansion of household utility (V) around the initial allocation $(c_0, h_0, f_0, b_0, p_0)$:

$$
\begin{aligned}
dV \approx& (1+\kappa p_0)u'(c_0)(c-c_0) - v'(h_0)(h-h_0) - y'(f_0)(f-f_0) \\
& - (1-\eta p_0)s'(b_0)(b-b_0) - [z'(p_0) - \kappa u(c_0) - \eta s(b_0)](p-p_0) \\
& + \frac{1}{2}[(1+\kappa p_0)u''(c_0)(c-c_0)^2 - v''(h_0)(h-h_0)^2 - y''(f_0)(f-f_0)^2 \\
& - (1-\eta p_0)s''(b_0)(b-b_0)^2 - z''(p_0)(p-p_0)^2] \\
& + \kappa u'(c_0)(c-c_0)(p-p_0) - \eta s'(b_0)(b-b_0)(p-p_0)
\end{aligned} \tag{21}
$$

We determine the consumption change from the budget constraint (where we sign loss

as being positive):

$$
\begin{aligned}
& c = w(p)h(1-\tau) + D(1-\sigma(p)) + b(1-\delta D) + f(1-\alpha D)(1-\tau) \\
\implies\ & dc = \underbrace{dD\left(1-\sigma(p)-\delta b-\alpha f(1-\tau)\right)}_{\text{mechanical change}>0} \\
& \quad + \underbrace{w(p)(1-\tau)\frac{dh}{dD}dD}_{\text{work adjustment}<0} + \underbrace{\left(hw'(p)(1-\tau)\frac{dp}{dD} - D\sigma'(p)\frac{dp}{dD}\right)dD}_{\text{Rx adjustment}<0} \\
& \quad + \underbrace{(1-\delta D)\frac{db}{dD}dD}_{\text{other program adjustment}<0} + \underbrace{(1-\alpha D)(1-\tau)\frac{df}{dD}dD}_{\text{family adjustment}<0}
\end{aligned} \tag{22}
$$

Substitute dc into dV to get:

$$
\begin{aligned}
dV \approx\ & \underbrace{(1+\kappa p_0)u'(c_0)\left(1-\sigma(p_0)-\delta b_0-\alpha f_0(1-\tau)\right)dD}_{\text{First-order effect (excludes behavioral responses)}} \\
& \underbrace{-\frac{1}{2}(1+\kappa p_0)u''(c_0)\left(\frac{dc}{dD}dD\right)^2}_{\text{Second-order effect from consumption loss}} \\
& \underbrace{-\frac{1}{2}\left[v''(h_0)\left(\frac{dh}{dD}dD\right)^2 + y''(f_0)\left(\frac{df}{dD}dD\right)^2 + (1-\eta p_0)s''(b_0)\left(\frac{db}{dD}dD\right)^2 + z''(p_0)\left(\frac{dp}{dD}dD\right)^2\right]}_{\text{Second-order effect from behavioral responses (work, R}_{\text{x}}\text{, other programs, family)}} \\
& \underbrace{+\kappa u'(c_0)\left(\frac{dc}{dD}dD\right)\left(\frac{dp}{dD}dD\right) - \eta s'(b_0)\left(\frac{db}{dD}dD\right)\left(\frac{dp}{dD}dD\right)}_{\text{Second-order effect from behavioral responses (interactions)}}
\end{aligned} \tag{23}
$$

Notice that the first-order welfare effects of DSP loss do not depend on behavioral responses. However, the behavioral responses show up in the second-order welfare effects.

Notice that dV in equation (23) is a function of unknown preference terms like u'', v'', y'', s'', and z''. By implicitly differentiating the FOCs, we can replace these unknown preference terms with known behavioral responses:

$$
\begin{aligned}
v''(h)\frac{dh}{dD}dD =& u''(c)(1+\kappa p)w(p)(1-\tau)\frac{dc}{dD}dD + u'(c)(1-\tau)[\kappa w(p) + (1+\kappa p)w'(p)]\frac{dp}{dD}dD \\
z''(p)\frac{dp}{dD}dD - \kappa u'(c)\frac{dc}{dD}dD - \eta s'(b)\frac{db}{dD}dD & \\
=& u''(c)(1+\kappa p)[w'(p)h(1-\tau) - D\sigma'(p)]\frac{dc}{dD}dD \\
&+ u'(c)\kappa[w'(p)h(1-\tau) - D\sigma'(p)]\frac{dp}{dD}dD \\
&+ u'(c)(1+\kappa p)[w''(p)h(1-\tau)\frac{dp}{dD}dD + w'(p)(1-\tau)\frac{dh}{dD}dD - \sigma'(p)dD] \\
s''(b)(1-\eta p)\frac{db}{dD}dD - \eta s'(b)\frac{dp}{dD}dD & \\
=& u''(c)(1+\kappa p)(1-\delta D)\frac{dc}{dD}dD + u'(c)\kappa(1-\delta D)\frac{dp}{dD}dD + u'(c)(1+\kappa p)(-\delta D) \\
y''(f)\frac{df}{dD}dD =& u''(c)(1+\kappa p)(1-\alpha D)(1-\tau)\frac{dc}{dD}dD \\
&+ u'(c)(1+\kappa p)(-\alpha dD)(1-\tau) + u'(c)\kappa(1-\alpha D)(1-\tau)\frac{dp}{dD}dD
\end{aligned}
\tag{24}
$$

We substitute these terms into the dV expression to get the change in household welfare as as function of behavioral responses. To express the welfare loss in terms of willingness to

pay, we divide dV by the marginal utility of consumption:

$$
\begin{aligned}
WTP \equiv \frac{dV}{(1+\kappa p)u'(c)} = {} & [1-\sigma(p_0)-\delta b_0-\alpha f_0(1-\tau)]\,dD \\
& + \frac{1}{2}\left(\frac{dc}{dD}dD\right)^2\left[\gamma\frac{1}{c_0}\right] \\
& + \frac{1}{2}\left(\frac{dc}{dD}dD\right)\left(\frac{dh}{dD}dD\right)\left[\gamma\frac{1}{c_0}w(p)(1-\tau)\right] \\
& - \frac{1}{2}\left(\frac{dh}{dD}dD\right)\left(\frac{dp}{dD}dD\right)\left[\frac{\kappa}{1+\kappa p}w(p)(1-\tau)+2w'(p)(1-\tau)\right] \\
& - \left(\frac{db}{dD}dD\right)\left(\frac{dp}{dD}dD\right)\left[\frac{2\eta(1-\delta D)}{1-\eta p}+\frac{\kappa}{2(1+\kappa p)}(1-\delta D)\right] \\
& - \frac{1}{2}\left(\frac{dc}{dD}dD\right)\left(\frac{dp}{dD}dD\right)\left[-\frac{\kappa}{1+\kappa p}-\gamma\frac{1}{c_0}[w'(p)h(1-\tau)-D\sigma'(p)]\right] \\
& - \frac{1}{2}\left(\frac{dp}{dD}dD\right)^2\left[\frac{\kappa}{1+\kappa p}[w'(p)h(1-\tau)-D\sigma'(p)]+w''(p)h(1-\tau)\right] \\
& + \frac{1}{2}\left(\frac{dp}{dD}dD\right)(dD)\left[\sigma'(p)\right] \\
& + \frac{1}{2}\left(\frac{db}{dD}dD\right)\left(\frac{dc}{dD}dD\right)\left[\gamma\frac{1}{c_0}(1-\delta D)\right] \\
& + \frac{1}{2}\left(\frac{db}{dD}dD\right)(dD)\left[\delta\right] \\
& + \frac{1}{2}\left(\frac{dc}{dD}dD\right)\left(\frac{df}{dD}dD\right)\left[\gamma\frac{1}{c_0}(1-\alpha D)(1-\tau)\right] \\
& - \frac{1}{2}\left(\frac{df}{dD}dD\right)\left(\frac{dp}{dD}dD\right)\left[\frac{\kappa}{1+\kappa p}(1-\alpha D)(1-\tau)\right] \\
& + \frac{1}{2}\left(\frac{df}{dD}dD\right)(dD)\left[\alpha(1-\tau)\right]
\end{aligned}
\tag{25}
$$

where $\gamma \equiv -\frac{u''(c_0)}{u'(c_0)}c_0$ is the coefficient of relative risk aversion.

Notice that (with the exception of γ) we can write the change in private welfare entirely in terms of behavioral responses (and wage and tax functions) without any preferences (e.g., marginal disutility of drugs). In other words, assuming that households maximize the objective function in equation (6), the behavioral responses are sufficient for the change in private welfare due to DSP removal, without needing to know preferences (other than γ). Recall from the discussion in Section 5.1 that the behavioral responses themselves are a function of preferences.

C.3 Welfare analysis with limited margins of adjustment

Suppose that we used a non-marginal welfare analysis but that the only observable margin of adjustment, as is the case in most previous work, was the DSP recipient's own work. The problem would become the following:

$$\begin{aligned} V = \max_{c,h} \; & u(c) - v(h) \\ \text{s.t. } & c \leq wh + D - \tau(wh) \end{aligned} \tag{26}$$

The first order conditions are as follows:

$$u'(c) = \lambda \tag{27}$$

$$v'(h) = \lambda w \tag{28}$$

$$wh + D - \tau(wh) - c = 0 \tag{29}$$

Implicit differentiation of the FOCs, and assuming the tax function $\tau()$ is linear, yields:

$$\begin{aligned} v''(h)\frac{dh}{dD}dD &= u''(c)w(1-\tau'(wh))\frac{dc}{dD}dD \\ w(1-\tau'(wh))\frac{dh}{dD}dD + 1 - \frac{dc}{dD}dD &= 0 \end{aligned}$$

The change in private welfare becomes

$$\begin{aligned} dV_{\text{simple}} &= u'(c_0)dD - \frac{1}{2}u''(c_0)\left(\frac{dc}{dD}dD\right)^2 - \frac{1}{2}v''(h_0)\left(\frac{dh}{dD}dD\right)^2 \\ &= u'(c_0)dD - \frac{1}{2}u''(c_0)\left(\frac{dc}{dD}dD\right)^2 - \frac{1}{2}w_0\left[u''(c)(1-\tau'(w_0h_0))\left(\frac{dc}{dD}dD\right)\left(\frac{dh}{dD}dD\right)\right] \end{aligned} \tag{30}$$

The willingness to pay to avoid DSP loss becomes

$$\begin{aligned} WTP_{\text{simple}} &\equiv \frac{dV}{u'(c_0)} \\ &= dD + \frac{1}{2}\frac{\gamma}{c_0}\left(\frac{dc}{dD}dD\right)^2 + \frac{1}{2}\frac{\gamma}{c_0}w_0(1-\tau'(w_0h_0))\left(\frac{dc}{dD}dD\right)\left(\frac{dh}{dD}dD\right) \end{aligned} \tag{31}$$

C.4 Welfare analysis with state-dependent disutility of work

We consider a modification of the basic utility setup in which the disutility of work depends on DSP receipt. This modification allows for the possibility that DSP recipients,

when removed from DSP, learn that their disutility of work is not as high as they previously thought, and therefore that working might improve their well-being.

In the modified setup, the disutility of work becomes a function of both h and D:

$$\begin{aligned} V = \max_{c,h,f,b,p} & (1+\kappa p)u(c) - v(h,D) - y(f) - (1-\eta p)s(b) - z(p) \\ \text{s.t. } & c \leq w(p)h(1-\tau) + D(1-\sigma(p)) + f(1-\alpha D)(1-\tau) + b(1-\delta D) \end{aligned} \tag{32}$$

with

$$v(h,D) = \frac{1}{2}\omega D h^2 \tag{33}$$

where ω governs the magnitude of the disutility of work when someone receives DSP ($D > 0$).

The first order conditions with respect to h becomes:

$$v_h(h,D) = \lambda w(p)(1-\tau'(w(p)h)) \tag{34}$$

Implicit differentiation of this FOC yields

$$v_{hh}(h,D)\frac{dh}{dD}dD + v_{hD}(h,D)dD = u'(c)w'(p)(1-\tau')\frac{dp}{dD}dD + u_{cc}(c)w(p)(1-\tau')\frac{dc}{dD}dD$$

and the change in private welfare and willingness to pay become

$$dV_{\text{workgood}} = dV - v_{hD}dD\left(\frac{dh}{dD}dD\right) \tag{35}$$

$$WTP_{\text{workgood}} = WTP - \frac{v_{hD}}{u_c}dD\left(\frac{dh}{dD}dD\right) \tag{36}$$

where dV and WTP are defined in equation (25).

Suppose $u(c) = 2\sqrt{c}$ so $u'(c) = \frac{1}{\sqrt{c_0}}$, and $\omega = 2.5e-09$. For those who live with family, the net household welfare loss (WTP) under state-dependent utility is \$2,500, a decrease of \$2,100 (46% decrease) relative to the baseline model. The relative drop is so large for this group in part because the baseline welfare loss is small to begin with. In contrast, for those who live alone (who do not increase their own earnings much), the net household welfare loss under state-dependent utility is \$15,800, approximately the same (3% decrease) as under the baseline model. Appendix Figure A.13 shows welfare loss under different values of ω, which determines the disutility of work. Assuming work to not be harmful does not change the welfare picture of DSP loss much.