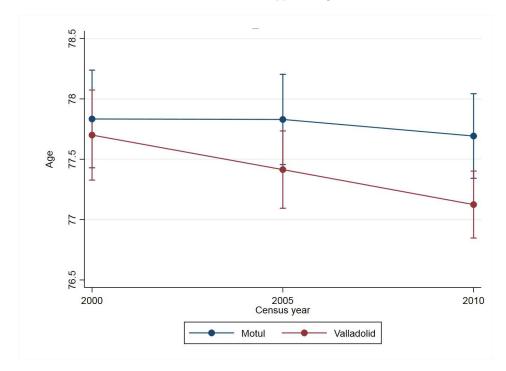
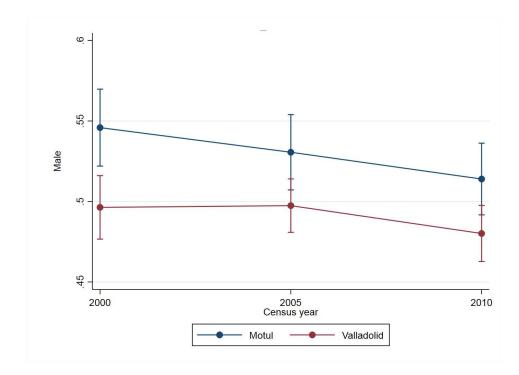
Old-age pensions and health care

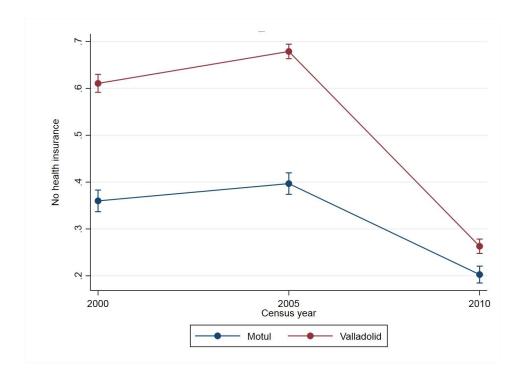
Appendix Figures



Appendix Figure 1. Descriptive statistics of age trends in Motul (control) and Valladolid (treatment)

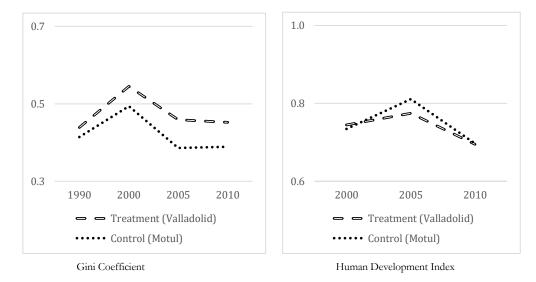


Appendix Figure 2. Descriptive statistics of gender trends in Motul (control) and Valladolid (treatment)



Appendix Figure 3. Descriptive statistics of health insurance coverage trends in Motul (control) and Valladolid (treatment)

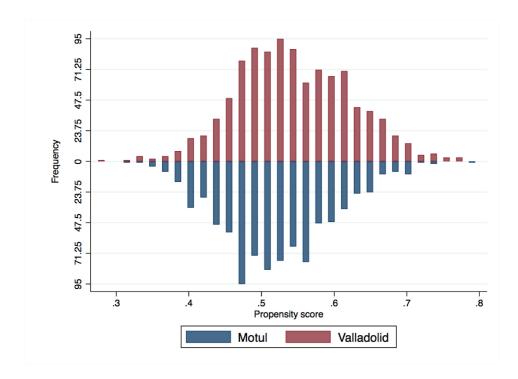
Old-age pensions and health care



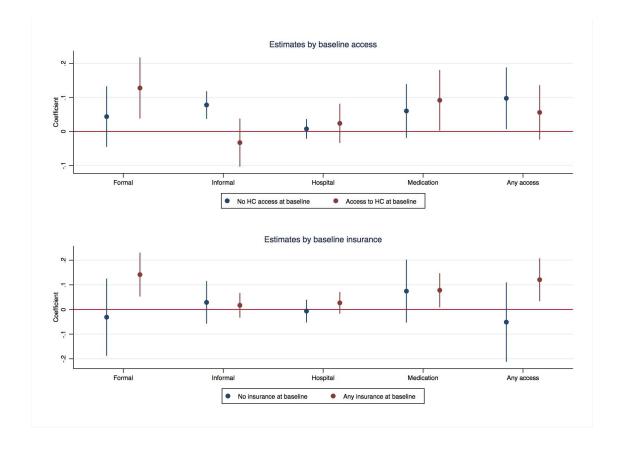
Appendix Figure 4 Inequality and Human Development Indexes for Treatment and Control Groups

Notes: The Human Development Index (HDI) is a composite statistic of life expectancy, education, and income per capita. The minimum and maximum values of the indicator are set from 0 to 1 where 1 represents the highest observed values for the components of the indicator and 0 represents subsistence values. The Gini coefficient is a measure of statistical dispersion that represents the income distribution of a particular population. The range of values for this coefficient is from 0 to 1. Values closer to 0 represent more equality in the distribution of income and values closer to 1 represent higher inequality in the distribution of income.

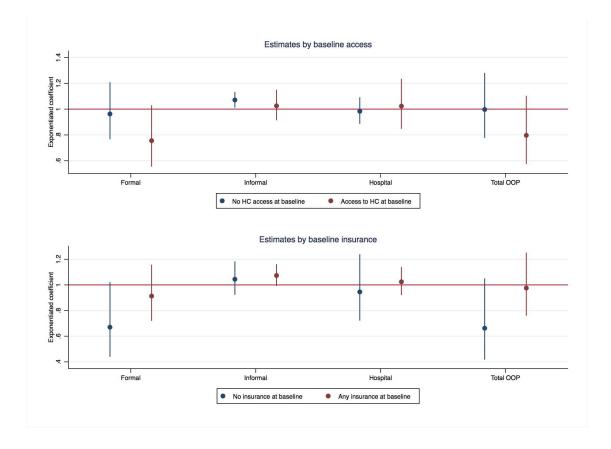
Sources: United Nations Development Program for Human Development Index and Consejo Nacional de Evaluacion de la Politica de Desarrollo Social [CONEVAL] for Gini Coefficient.



Appendix Figure 5. Propensity score estimates for Motul (control) and Valladolid (treatment)

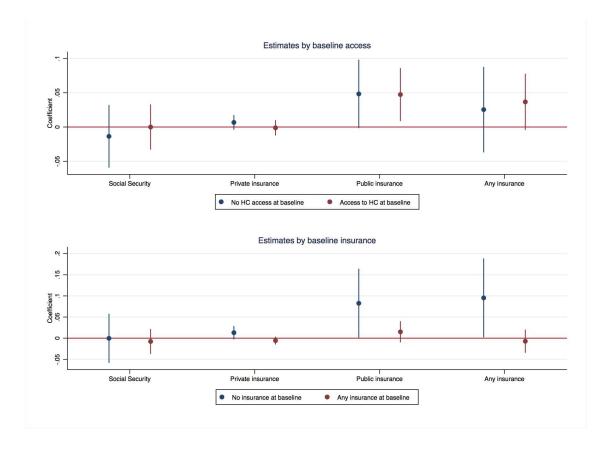


Appendix Figure 6 Impact of old-age pensions on health care utilization by baseline access and insurance coverage from matched difference-in-difference models

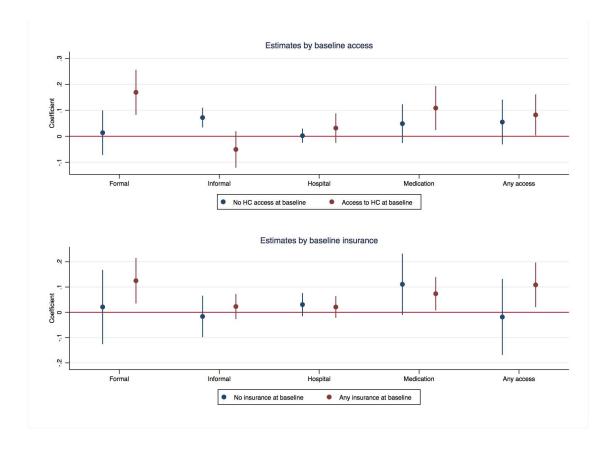


Appendix Figure 7 Impact of old-age pensions on health care expenditures by baseline access and insurance coverage from matched difference-in-difference models

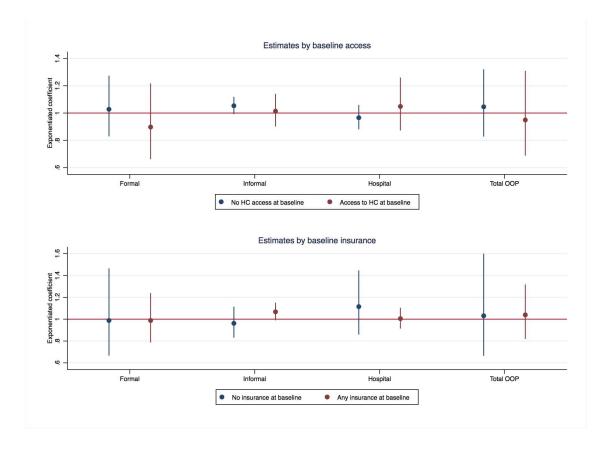
Old-age pensions and health care



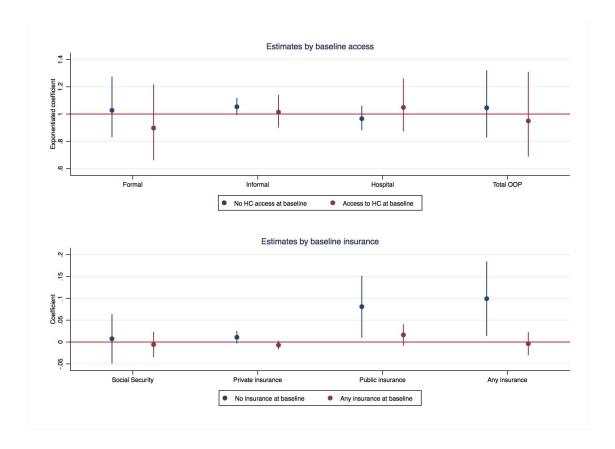
Appendix Figure 8 Impact of old-age pensions on health care insurance uptake by baseline access and insurance coverage from matched difference-in-difference models



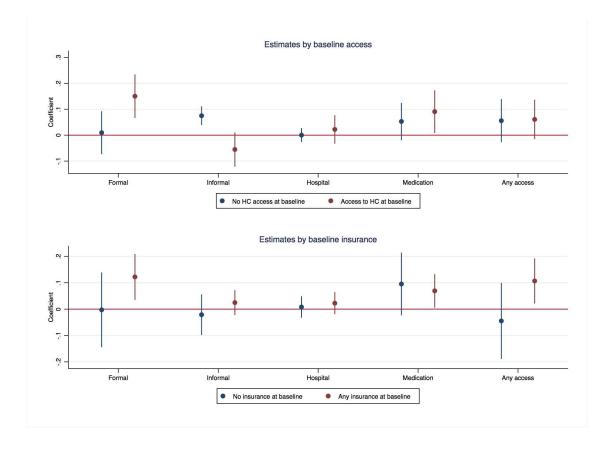
Appendix Figure 9 Impact of pension uptake on health care utilization by baseline access and insurance coverage



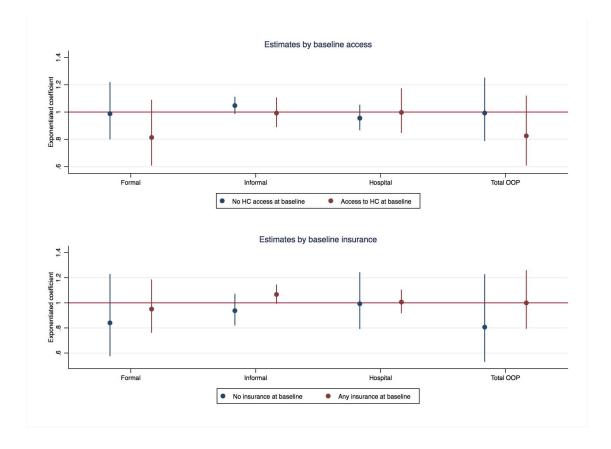
Appendix Figure 10 Impact of pension uptake on health care expenditure by baseline access and insurance coverage



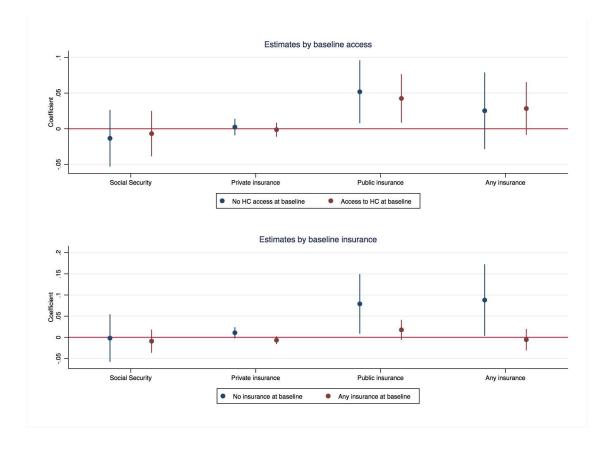
Appendix Figure 11 Impact of pension uptake on health insurance uptake by baseline access and insurance coverage



Appendix Figure 12 Impact of pension uptake on health care utilization by baseline access and insurance coverage using clustered standard errors at individual level



Appendix Figure 13 Impact of pension uptake on health care expenditure by baseline access and insurance coverage using clustered standard errors at the individual level



Appendix Figure 14 Impact of pension uptake on health insurance uptake by baseline access and insurance coverage using clustered standard errors at the individual level

Appendix Tables

Appendix Table 1 Comparison of Valladolid and Motul with other localities with 20000 to 50000 inhabitants

| | Valladolid (%) | Motul (%) | %P5 | %P25 | %P50 | %P75 | %P95 |
|---|----------------|-----------|------|------|------|------|------|
| Households without earthen floor | 93,9 | 96,0 | 79,0 | 88,6 | 92,4 | 95,0 | 97,1 |
| Households with earthen floor | 3,5 | 2,9 | 0,8 | 2,5 | 4,9 | 8,6 | 18,8 |
| Households with access to potable water | 91,7 | 88,9 | 60,5 | 87,4 | 93,7 | 95,9 | 97,3 |
| Households with electricity | 95,9 | 96,9 | 91,8 | 95,6 | 96,6 | 97,4 | 98,4 |
| Households with television | 90,8 | 91,9 | 86,4 | 91,1 | 94,1 | 95,3 | 96,9 |
| Households with fridge | 73,5 | 71,4 | 59,0 | 75,4 | 82,4 | 88,3 | 93,1 |
| Households with washing machine | 57,6 | 60,9 | 35,0 | 53,1 | 64,7 | 74,6 | 83,7 |

Old-age pensions and health care

Appendix Table 2 Comparison of ENCAHEY Screener in 2008 and Mexican Census 2005 and 2010

| | , | Valladolid | | | Motul | |
|--|---------|------------|--------|---------|--------|--------|
| S 1 - | ENCAHEY | Census | Census | ENCAHEY | Census | Census |
| Sample | 2008 | 2005 | 2010 | 2008 | 2005 | 2010 |
| Total number of households | 9,990 | 10,390 | 12,003 | 5,922 | 4,973 | 5,964 |
| No. of households not contacted | 342 | | | 266 | | |
| No. of households refusing screener | 1,644 | | | 1,594 | | |
| No. of households without age-eligible persons | 6,678 | | | 3,082 | | |
| No. of age-eligible households | 1,326 | 1,320 | 1,586 | 980 | 967 | 1,306 |
| No. of age-eligible persons | 1,594 | 1,601 | 1,628 | 1,131 | 1,266 | 1,922 |

Appendix Table 3. Descriptive statistics of panel and baseline sample

| | Treatment Control | | | | ontrol | | | | | |
|---------------------------|-------------------|-------|------------|---------|----------|-------|------------|---------|--------------|---------|
| | Baseline | Panel | Difference | P-value | Baseline | Panel | Difference | p-value | Diff-in-diff | P-value |
| Male | 0.48 | 0.47 | -0.011 | 0.786 | 0.49 | 0.52 | 0.032 | 0.440 | 0.043 | 0.228 |
| SD | 0.04 | 0.01 | 0.040 | | 0.04 | 0.02 | 0.041 | | 0.057 | |
| Age | 79.53 | 77.58 | -1.960 | 0.001 | 78.70 | 77.60 | -1.104 | 0.044 | 0.856 | 0.147 |
| SĎ | 0.57 | 0.19 | 0.604 | | 0.50 | 0.22 | 0.546 | | 0.814 | |
| Education | 1.96 | 1.76 | -0.197 | 0.230 | 2.17 | 1.85 | -0.315 | 0.040 | -0.118 | 0.299 |
| SD | 0.15 | 0.06 | 0.164 | | 0.14 | 0.06 | 0.152 | | 0.224 | |
| Couple | 0.48 | 0.53 | 0.050 | 0.208 | 0.56 | 0.51 | -0.047 | 0.250 | -0.097 | 0.044 |
| SD | 0.04 | 0.01 | 0.040 | | 0.04 | 0.02 | 0.041 | | 0.057 | |
| Divorced/Separated | 0.04 | 0.03 | -0.004 | 0.815 | 0.03 | 0.03 | -0.001 | 0.945 | 0.003 | 0.449 |
| SD | 0.01 | 0.01 | 0.015 | | 0.01 | 0.01 | 0.013 | | 0.020 | |
| Widow | 0.41 | 0.38 | -0.029 | 0.461 | 0.38 | 0.39 | 0.015 | 0.702 | 0.044 | 0.215 |
| SD | 0.04 | 0.01 | 0.039 | | 0.04 | 0.02 | 0.040 | | 0.056 | |
| Household size | 3.44 | 3.42 | -0.029 | 0.869 | 3.30 | 3.48 | 0.181 | 0.272 | 0.210 | 0.190 |
| SD | 0.16 | 0.06 | 0.174 | | 0.15 | 0.07 | 0.164 | | 0.239 | |
| Work for pay | 0.17 | 0.17 | -0.006 | 0.842 | 0.10 | 0.16 | 0.059 | 0.026 | 0.065 | 0.052 |
| SD 1 | 0.03 | 0.01 | 0.030 | | 0.02 | 0.01 | 0.026 | | 0.040 | |
| Household income | 90.99 | 81.77 | -9.220 | 0.446 | 150 | 922 | 82.94 | 76.61 | -6.326 | 90.99 |
| SD | 11.66 | 3.09 | 12.066 | | 3.75 | 3.13 | 4.886 | | 13.018 | |
| Chronic | 0.83 | 0.75 | -0.086 | 0.268 | 1.07 | 0.85 | -0.214 | 0.008 | -0.128 | 0.126 |
| SD | 0.07 | 0.03 | 0.077 | | 0.07 | 0.03 | 0.081 | | 0.112 | |
| ADL Limitations | 4.93 | 4.63 | -0.298 | 0.381 | 4.83 | 4.80 | -0.034 | 0.893 | 0.264 | 0.265 |
| | 0.32 | 0.12 | 0.339 | | 0.18 | 0.18 | 0.250 | 0.000 | 0.421 | |
| Reconocer | 0.00 | 0.00 | 0.000 | | 0.00 | 0.00 | 0.000 | | 0.000 | |
| SD | 0.00 | 0.00 | 0.000 | | 0.00 | 0.00 | 0.000 | | 0.000 | |
| Formal care utilization | 0.45 | 0.46 | 0.010 | 0.805 | 0.55 | 0.52 | -0.039 | 0.341 | -0.049 | 0.195 |
| SD | 0.04 | 0.01 | 0.039 | | 0.04 | 0.02 | 0.041 | | 0.057 | |
| Informal care utilization | 0.12 | 0.12 | -0.002 | 0.952 | 0.06 | 0.07 | 0.010 | 0.604 | 0.012 | 0.358 |
| SD | 0.02 | 0.01 | 0.026 | **** | 0.02 | 0.01 | 0.020 | | 0.033 | |
| Hospital care utilization | 0.12 | 0.05 | -0.065 | 0.009 | 0.08 | 0.06 | -0.023 | 0.301 | 0.042 | 0.104 |
| SD | 0.02 | 0.01 | 0.025 | | 0.02 | 0.01 | 0.022 | | 0.033 | |
| Medication adherence | 0.79 | 0.76 | -0.035 | 0.276 | 0.83 | 0.82 | -0.012 | 0.696 | 0.023 | 0.303 |
| SD | 0.03 | 0.01 | 0.032 | | 0.03 | 0.01 | 0.031 | | 0.045 | |
| Formal expenditures | 13.13 | 11.72 | -1.417 | 0.703 | 21.42 | 8.27 | -13.153 | 0.198 | -11.736 | 0.139 |
| SD | 3.50 | 1.23 | 3.707 | | 10.00 | 1.93 | 10.181 | | 10.835 | |
| Informal expenditures | 1.45 | 1.02 | -0.432 | 0.662 | 0.55 | 0.15 | -0.393 | 0.409 | 0.039 | 0.486 |
| $\stackrel{1}{\text{SD}}$ | 0.94 | 0.32 | 0.988 | | 0.47 | 0.05 | 0.474 | | 1.096 | |
| Hospital expenditures | 41.07 | 24.03 | -17.046 | 0.616 | 1.47 | 4.36 | 2.899 | 0.269 | 19.944 | 0.279 |
| SD | 32.19 | 10.90 | 33.984 | | 1.01 | 2.42 | 2.622 | | 34.085 | |
| Total OOP expenditures | 55.66 | 36.76 | -18.895 | 0.583 | 23.43 | 12.79 | -10.647 | 0.319 | 8.248 | 0.409 |
| SD | 32.47 | 11.32 | 34.387 | | 10.05 | 3.55 | 10.657 | | 36.000 | |
| Social security | 0.42 | 0.39 | -0.022 | 0.582 | 0.63 | 0.64 | 0.012 | 0.759 | 0.034 | 0.272 |
| SD | 0.04 | 0.01 | 0.039 | | 0.04 | 0.02 | 0.040 | | 0.056 | |
| Private insurance | 0.04 | 0.03 | -0.009 | 0.551 | 0.02 | 0.00 | -0.014 | 0.149 | -0.005 | 0.387 |
| SD | 0.01 | 0.01 | 0.015 | | 0.01 | 0.00 | 0.010 | | 0.018 | |
| Public insurance | 0.21 | 0.28 | 0.075 | 0.025 | 0.06 | 0.11 | 0.049 | 0.016 | -0.025 | 0.257 |
| SD | 0.03 | 0.01 | 0.033 | | 0.02 | 0.01 | 0.020 | | 0.039 | |
| Health insurance | 0.66 | 0.68 | 0.027 | 0.471 | 0.70 | 0.74 | 0.038 | 0.316 | 0.010 | 0.422 |
| SD | 0.03 | 0.01 | 0.037 | | 0.03 | 0.02 | 0.037 | | 0.053 | |
| Observations | 187 | 1120 | | | 182 | 791 | | | | |
| | | | | | | | | | | |

Appendix Table 4. Descriptive statistics of panel sample and those that die between first and second wave

| | Treatment Control | | | | Control | | | | | |
|---------------------------|-------------------|-------|------------|---------|---------|-------|------------|---------|--------------|---------|
| | Dead | Panel | Difference | P-value | Dead | Panel | Difference | P-value | Diff-in-diff | P-value |
| Male | 0.49 | 0.47 | -0.027 | 0.674 | 0.44 | 0.52 | 0.082 | 0.235 | 0.109 | 0.122 |
| SD | 0.06 | 0.01 | 0.064 | | 0.07 | 0.02 | 0.069 | | 0.094 | |
| Age | 84.35 | 77.58 | -6.779 | 0.000 | 81.46 | 77.60 | -3.857 | 0.000 | 2.922 | 0.019 |
| SD | 1.00 | 0.19 | 1.019 | | 0.95 | 0.22 | 0.979 | | 1.413 | |
| Education | 1.83 | 1.76 | -0.065 | 0.811 | 1.71 | 1.85 | 0.137 | 0.576 | 0.203 | 0.290 |
| SD | 0.26 | 0.06 | 0.271 | | 0.24 | 0.06 | 0.245 | | 0.365 | |
| Couple | 0.45 | 0.53 | 0.085 | 0.187 | 0.47 | 0.51 | 0.040 | 0.568 | -0.046 | 0.314 |
| SD | 0.06 | 0.01 | 0.064 | | 0.07 | 0.02 | 0.069 | | 0.094 | |
| Divorced/Separated | 0.02 | 0.03 | 0.019 | 0.259 | 0.04 | 0.03 | -0.009 | 0.736 | -0.027 | 0.184 |
| SD | 0.02 | 0.01 | 0.016 | | 0.02 | 0.01 | 0.025 | | 0.030 | |
| Widow | 0.49 | 0.38 | -0.109 | 0.093 | 0.46 | 0.39 | -0.062 | 0.373 | 0.048 | 0.307 |
| SD | 0.06 | 0.01 | 0.064 | | 0.07 | 0.02 | 0.069 | | 0.094 | |
| Household size | 3.62 | 3.42 | -0.200 | 0.428 | 3.82 | 3.48 | -0.347 | 0.224 | -0.146 | 0.349 |
| SD | 0.24 | 0.06 | 0.251 | | 0.27 | 0.07 | 0.282 | | 0.378 | |
| Work for pay | 0.08 | 0.17 | 0.088 | 0.014 | 0.09 | 0.16 | 0.075 | 0.064 | -0.013 | 0.404 |
| SD | 0.03 | 0.01 | 0.035 | | 0.04 | 0.01 | 0.040 | | 0.053 | |
| Household income | 87.12 | 81.77 | -5.351 | 0.809 | 78.72 | 76.61 | -2.113 | 0.663 | 3.238 | 0.443 |
| | 21.78 | 3.09 | 22.000 | 0.002 | 3.69 | 3.13 | 4.842 | | 22.527 | ******* |
| Chronic | 0.92 | 0.75 | -0.175 | 0.187 | 1.23 | 0.85 | -0.376 | 0.012 | -0.201 | 0.152 |
| SD | 0.13 | 0.03 | 0.131 | 0.20 | 0.14 | 0.03 | 0.146 | ***** | 0.196 | ***** |
| ADL Score | 6.73 | 4.63 | -2.099 | 0.002 | 5.06 | 4.80 | -0.255 | 0.345 | 1.844 | 0.004 |
| 1121 00010 | 0.62 | 0.12 | 0.629 | 0.002 | 0.21 | 0.18 | 0.270 | 0.5 15 | 0.685 | 0.001 |
| Reconocer | 0.00 | 0.00 | 0.000 | | 0.00 | 0.00 | 0.000 | | 0.000 | |
| SD | 0.00 | 0.00 | 0.000 | | 0.00 | 0.00 | 0.000 | | 0.000 | |
| Formal care utilization | 0.46 | 0.46 | 0.003 | 0.966 | 0.56 | 0.52 | -0.046 | 0.509 | -0.048 | 0.303 |
| SD | 0.06 | 0.01 | 0.064 | 0.700 | 0.07 | 0.02 | 0.069 | 0.007 | 0.094 | 0.000 |
| Informal care utilization | 0.12 | 0.12 | -0.002 | 0.969 | 0.05 | 0.07 | 0.018 | 0.562 | 0.020 | 0.353 |
| SD | 0.04 | 0.01 | 0.042 | 0.707 | 0.03 | 0.01 | 0.031 | 0.502 | 0.052 | 0.555 |
| Hospital care utilization | 0.22 | 0.05 | -0.165 | 0.003 | 0.14 | 0.06 | -0.081 | 0.092 | 0.084 | 0.116 |
| SD | 0.05 | 0.01 | 0.053 | 0.000 | 0.05 | 0.01 | 0.047 | 0.072 | 0.071 | 0.110 |
| Medication adherence | 0.80 | 0.76 | -0.044 | 0.397 | 0.79 | 0.82 | 0.028 | 0.620 | 0.072 | 0.173 |
| SD | 0.05 | 0.01 | 0.052 | 0.00 | 0.05 | 0.01 | 0.056 | 0.020 | 0.076 | 0.175 |
| Formal expenditures | 17.96 | 11.72 | -6.246 | 0.480 | 7.09 | 8.27 | 1.184 | 0.676 | 7.430 | 0.211 |
| SD | 8.71 | 1.23 | 8.801 | 0.100 | 2.07 | 1.93 | 2.829 | 0.070 | 9.245 | 0.211 |
| Informal expenditures | 3.58 | 1.02 | -2.559 | 0.344 | 1.59 | 0.15 | -1.439 | 0.343 | 1.121 | 0.358 |
| SD | 2.67 | 0.32 | 2.686 | 0.511 | 1.50 | 0.05 | 1.503 | 0.0 10 | 3.078 | 0.000 |
| Hospital expenditures | 17.72 | 24.03 | 6.307 | 0.641 | 1.08 | 4.36 | 3.287 | 0.215 | -3.020 | 0.413 |
| SD | 8.00 | 10.90 | 13.518 | 0.011 | 1.08 | 2.42 | 2.647 | 0.213 | 13.775 | 0.115 |
| Total OOP expenditures | 39.26 | 36.76 | -2.498 | 0.882 | 9.75 | 12.79 | 3.033 | 0.504 | 5.531 | 0.375 |
| SD | 12.37 | 11.32 | 16.768 | 0.002 | 2.82 | 3.55 | 4.536 | 0.001 | 17.370 | 0.070 |
| Social security | 0.35 | 0.39 | 0.040 | 0.520 | 0.71 | 0.64 | -0.066 | 0.311 | -0.105 | 0.118 |
| SD | 0.06 | 0.01 | 0.062 | 0.520 | 0.06 | 0.02 | 0.064 | 0.511 | 0.089 | 0.110 |
| Private insurance | 0.03 | 0.03 | -0.002 | 0.945 | 0.02 | 0.00 | -0.016 | 0.396 | -0.014 | 0.312 |
| SD | 0.03 | 0.03 | 0.022 | 0.773 | 0.02 | 0.00 | 0.018 | 0.570 | 0.029 | 0.512 |
| Public insurance | 0.32 | 0.28 | -0.041 | 0.498 | 0.02 | 0.00 | 0.018 | 0.015 | 0.029 | 0.049 |
| SD | 0.06 | 0.23 | 0.060 | 0.770 | 0.04 | 0.11 | 0.009 | 0.013 | 0.066 | U.UT) |
| Health insurance | 0.69 | 0.68 | -0.007 | 0.900 | 0.03 | 0.74 | -0.014 | 0.821 | -0.006 | 0.471 |
| SD | 0.09 | 0.00 | 0.059 | 0.700 | 0.75 | 0.74 | 0.060 | 0.041 | 0.084 | U.T/1 |
| | 65 | 1120 | 0.039 | | 57 | 791 | 0.000 | | 0.004 | |
| Observations | υɔ | 1120 | | | 3/ | / 91 | | | | |

Old-age pensions and health care

Appendix Table 5 OLS Regression of common trends assumption for OOP expenditures using data from ENIGH survey in Mexico

| | OOP health expenditure per capita | Primary care and hospitalization expenditure per capita |
|------------------------|-----------------------------------|---|
| Valladolid | 80.8251 | 105.2127 |
| | (181.1550) | (161.3020) |
| Interaction terms | , , | , , |
| Valladolid *2005 | 348.9858 | 322.1923 |
| | (331.2560) | (309.7650) |
| Valladolid *2006 | 116.1298 | 91.4556 |
| | (212.9740) | (195.6610) |
| Valladolid *2008 | 313.6093 | 256.9465 |
| | (240.4440) | (217.3310) |
| Valladolid *2010 | 64.8180 | 29.7004 |
| | (230.8130) | (214.0690) |
| Year | | |
| 2005 | -91.0360 | -54.8583 |
| | (141.4500) | (123.8450) |
| 2006 | -146.8766 | -96.2453 |
| | (135.8780) | (119.8490) |
| 2008 | -206.5759 | -160.3200 |
| | (131.1150) | (112.3300) |
| 2010 | -41.9065 | 10.6572 |
| | (149.1750) | (134.3540) |
| Constant | 277.2063** | 207.1878* |
| | (127.3600) | (109.4430) |
| F (interaction) | 0.6731 | 0.6200 |
| Prob > F (interaction) | 0.6112 | 0.6486 |

Note: Robust standard errors in parenthesis. The model before compares the trends of health care expenditure in treatment and control villages using data from the Mexican Household Economic Survey from 2004 until 2010. The year 2004 was used as the reference category.

^{*} p < .1, ** p < .05, *** p < .01

Old-age pensions and health care

Appendix Table 6 OLS Regression of common trends assumption for poverty variables using data from Census

| | Earthen floor | Number of rooms | Access to potable water | Sewage | Electricity | Lives alone |
|------------------------|---------------|-----------------|-------------------------|------------|-------------|-------------|
| Valladolid | 0.0753*** | 0.1490** | -0.0043 | -0.0033 | -0.0076 | -0.0412** |
| | (0.0251) | (0.0716) | (0.0044) | (0.0086) | (0.0152) | (0.0168) |
| Interaction terms | | | | | | |
| Valladolid * 1995 | 0.1260 | -0.5860 | 0.0057 | 0.0030 | 0.0045 | 0.0054 |
| | (0.1590) | (0.6370) | (0.0053) | (0.0088) | (0.0184) | (0.0239) |
| Valladolid * 2000 | -0.0273 | 0.0327 | 0.0051 | 0.0018 | 0.0118 | 0.0135 |
| | (0.0413) | (0.1700) | (0.0060) | (0.0095) | (0.0174) | (0.0237) |
| Valladolid * 2005 | 0.0498 | 0.0097 | 0.0058 | 0.0049 | 0.0137 | 0.0129 |
| | (0.0385) | (0.1780) | (0.0046) | (0.0086) | (0.0169) | (0.0228) |
| Valladolid * 2010 | 0.0678 | -0.0941 | 0.0067 | 0.0042 | 0.0057 | -0.00386 |
| | (0.0676) | (0.4290) | (0.0054) | (0.0087) | (0.0162) | (0.0227) |
| Year | | | | | | |
| 1995 | -0.1340 | 0.5880 | -0.0055 | -0.0243*** | 0.0376*** | 0.0226 |
| | (0.1070) | (0.5700) | (0.0043) | (0.0067) | (0.0135) | (0.0190) |
| 2000 | -0.1800*** | 0.3333*** | -0.0019 | -0.0179** | 0.0472*** | 0.0255 |
| | (0.0277) | (0.1160) | (0.0047) | (0.0073) | (0.0128) | (0.0186) |
| 2005 | -0.2090*** | 0.4250*** | -0.0084** | -0.0257*** | 0.0483*** | 0.0317* |
| | (0.0250) | (0.1270) | (0.0037) | (0.0066) | (0.0126) | (0.0182) |
| 2010 | -0.2120*** | 1.4150*** | -0.0037 | -0.0247*** | 0.0617*** | 0.0648*** |
| | (0.0380) | (0.2860) | (0.0044) | (0.0066) | (0.0119) | (0.0183) |
| Constant | 0.2460*** | 2.4120*** | 0.0084** | 0.0257*** | 0.9200*** | 0.1230*** |
| | (0.0191) | (0.0504) | (0.0037) | (0.0066) | (0.0111) | (0.0134) |
| F (interaction) | 0.1520 | 0.5439 | 0.5439 | 0.4792 | 0.3349 | 0.1520 |
| Prob > F (interaction) | 0.9284 | 0.6522 | 0.6522 | 0.6967 | 0.8001 | 0.9284 |

Note: Robust standard errors in parentheses. The year 1990 was the reference category for lives alone, earthen floor, total number of rooms, access to potable water, sewage septic tank, sewage to lake, sewage not available, and electricity. Source: Census 1990, 1995, 2005, and 2010.

^{*} p < .1, ** p < .05, *** p < .01

Old-age pensions and health care

Appendix Table 7 Characteristics of population in treatment and control villages from 2005 census

| Variable (% or index) | Treatment (Valladolid) | Control (Motul) |
|---|---------------------------|--------------------|
| Illiterate population 15 years old or above | 10.9 | 11.2 |
| Households without electricity | 2.1 | 2.8 |
| Households with earthen floor | 3.6 | 2.9 |
| Households without refrigerator | 24.9 | 28.3 |
| Poverty index | -1.1 | -0.9 |

Old-age pensions and health care

Appendix Table 8 Odds ratio of the old-age pension program on health care utilization and insurance uptake

| | (1) | (2) | (3) | (4) | (5) |
|-------------------------|-----------------|---------------|----------------|---------------|---------------|
| Panel A: Health care ut | ilization | | | | |
| | Formal care | Informal care | Hospital stays | Medication | Any access |
| Treatment*Post | 1.651 | 1.091 | 1.430 | 2.225 | 1.399 |
| | [1.192,2.286] | [0.606,1.964] | [0.693,2.948] | [1.453,3.408] | [1.016,1.928] |
| Post | 0.978 | 0.746 | 0.614 | 1.109 | 0.972 |
| | [0.748,1.278] | [0.444,1.253] | [0.339,1.113] | [0.782,1.573] | [0.746,1.265] |
| Observations | 3855 | 3855 | 3854 | 3852 | 3855 |
| Individuals | 2432 | 2432 | 2431 | 2431 | 2432 |
| | | | | | |
| Panel B: Health insurar | nce uptake | | | | |
| | Social security | Private HI | Public HI | Any HI | |
| Treatment*Post | 0.721 | | 3.833 | 1.441 | |
| | [0.261,1.992] | | [1.280,11.478] | [0.615,3.376] | |
| Wave 2 | 1.100 | | 2.000 | 1.818 | |
| | [0.467,2.590] | | [0.856,4.673] | [0.871,3.795] | |
| Observations | 4060 | 4060 | 4060 | 4060 | |
| Individuals | 2487 | 2487 | 2487 | 2487 | |

Note: 95% Confidence intervals are obtained using bootstrapped standard errors. The coefficients are estimated with a matched individual fixed effect difference-in-difference models controlling for changes in age fixed effects, education years, marital status, household size, labour force status, chronic conditions, and number of limitations in daily living activities. Valladolid is the treatment village where the old-age pension scheme was implemented in December 2008. The models use data from the baseline and follow-up survey.

Old-age pensions and health care

Appendix Table 9 Effect of the old-age pension program on health care utilization, health expenditures, and insurance uptake using matched difference-in-differences

| | (1) | (2) | (3) | (4) | (5) |
|----------------------------|---------------------|-----------------|----------------|----------------|----------------|
| Panel A: Health care ut | ilization | | | | |
| | Formal care | Informal care | Hospital stays | Medication | Any access |
| Treatment*Post | 0.079 | 0.016 | 0.017 | 0.081 | 0.066 |
| | [0.002,0.156] | [-0.027,0.059] | [-0.016,0.051] | [0.020,0.141] | [-0.011,0.143] |
| Post | 0.070 | 0.108 | -0.071 | -0.171 | 0.063 |
| | [-0.277,0.417] | [-0.109, 0.326] | [-0.212,0.070] | [-0.383,0.041] | [-0.285,0.411] |
| Observations | 3033 | 3033 | 3032 | 3031 | 3033 |
| Individuals | 1811 | 1811 | 1810 | 1810 | 1811 |
| Panel B: Health care ex | penditures [[og+1] | | | | |
| t affer D. Freatti care ex | Formal care | Informal care | Hospital stays | Total OOP | |
| Γreatment*Post | -0.210 | 0.047 | 0.004 | -0.162 | |
| | [-0.414,-0.005] | [-0.018, 0.112] | [-0.103,0.112] | [-0.381,0.057] | |
| Wave 2 | 0.966 | 0.323 | -0.113 | 1.174 | |
| | [0.225,1.708] | [-0.224,0.870] | [-0.375,0.149] | [0.283,2.065] | |
| Observations | 3033 | 3033 | 3033 | 3033 | |
| Individuals | 1811 | 1811 | 1811 | 1811 | |
| Panel C: Health insurar | nce untake | | | | |
| | Social security | Private HI | Public HI | Any HI | |
| Γreatment*Post | -0.003 | 0.001 | 0.041 | 0.032 | |
| | [-0.030,0.024] | [-0.006,0.009] | [0.012,0.071] | [-0.003,0.068] | |
| Wave 2 | -0.018 | -0.010 | -0.007 | -0.040 | |
| | [-0.094,0.057] | [-0.030,0.011] | [-0.076,0.063] | [-0.132,0.052] | |
| Observations | 3026 | 3026 | 3026 | 3026 | |
| Individuals | 1811 | 1811 | 1811 | 1811 | |

Note: 95% Confidence intervals are obtained using bootstrapped standard errors. The coefficients are estimated with a matched individual fixed effect difference-in-difference models controlling for changes in age fixed effects, education years, marital status, household size, labour force status, chronic conditions, and number of limitations in daily living activities. Valladolid is the treatment village where the old-age pension scheme was implemented in December 2008. The models use data from the baseline and follow-up survey.

Old-age pensions and health care

Appendix Table 10 Effect of the pension uptake on health care utilization, health expenditures, and insurance uptake

| | (1) | (2) | (3) | (4) | (5) |
|-------------------------|------------------|----------------|----------------|-----------------|----------------|
| Panel A: Health care ut | ilization | | | | |
| | Formal care | Informal care | Hospital stays | Medication | Any access |
| Treatment*Post | 0.090 | 0.009 | 0.014 | 0.077 | 0.068 |
| 1 teatillent Post | [0.015,0.164] | [-0.032,0.050] | [-0.019,0.047] | [0.020,0.134] | [-0.006,0.143] |
| Post | 0.042 | 0.016 | -0.078 | -0.146 | 0.009 |
| 1 031 | [-0.261,0.345] | [-0.188,0.220] | [-0.220,0.065] | [-0.392,0.100] | [-0.300,0.319] |
| Observations | 3818 | 3818 | 3817 | 3815 | 3818 |
| Individuals | 2397 | 2397 | 2396 | 2396 | 2397 |
| menvicuais | 2371 | 2371 | 2370 | 2370 | 2371 |
| Panel B: Health care ex | penditures [Log] | | | | |
| | Formal care | Informal care | Hospital stays | Total OOP | |
| Treatment*Post | -0.120 | 0.024 | -0.013 | -0.100 | |
| | [-0.311,0.071] | [-0.040,0.089] | [-0.109,0.082] | [-0.305, 0.105] | |
| Wave 2 | 0.841 | 0.227 | -0.145 | 0.975 | |
| | [0.179,1.503] | [-0.248,0.702] | [-0.396,0.106] | [0.181,1.768] | |
| Observations | 3818 | 3818 | 3818 | 3818 | |
| Individuals | 2397 | 2397 | 2397 | 2397 | |
| D. 1CH M. | . 1 | | | | |
| Panel C: Health insurar | Social security | Private HI | Public HI | Any HI | |
| | Social security | Private H1 | Public H1 | Any HI | |
| Treatment*Post | -0.006 | -0.000 | 0.042 | 0.031 | |
| | [-0.032,0.020] | [-0.008,0.007] | [0.015,0.069] | [-0.002,0.063] | |
| Wave 2 | -0.021 | -0.008 | -0.011 | -0.048 | |
| | [-0.089,0.046] | [-0.028,0.011] | [-0.077,0.055] | [-0.136,0.041] | |
| Observations | 3751 | 3751 | 3751 | 3751 | |
| Individuals | 2367 | 2367 | 2367 | 2367 | |

Note: 95% Confidence intervals are obtained using bootstrapped standard errors. The coefficients are estimated with an individual fixed effect difference-in-difference models controlling for changes in age fixed effects, education years, marital status, household size, labour force status, chronic conditions, and number of limitations in daily living activities. Valladolid is the treatment village where the old-age pension program was implemented in December 2008. The models use data from the baseline and follow-up survey.

Old-age pensions and health care

Appendix Table 11 Effect of the pension uptake on health care utilization, health expenditures, and insurance uptake using standard errors clustered at individual level

| | (1) | (2) | (3) | (4) | (5) |
|-------------------------|------------------------------|----------------|-----------------|----------------|----------------|
| Panel A: Health care ut | ilization | , , | , , | , , | , , |
| | Formal care | Informal care | Hospital stays | Medication | Any access |
| Treatment*Post | 0.090 | 0.009 | 0.014 | 0.077 | 0.068 |
| | [0.017,0.162] | [-0.031,0.049] | [-0.018,0.046] | [0.021,0.132] | [-0.004,0.141] |
| Post | 0.042 | 0.016 | -0.078 | -0.146 | 0.009 |
| | [-0.242,0.326] | [-0.174,0.206] | [-0.210,0.054] | [-0.374,0.083] | [-0.280,0.299] |
| Observations | 3818 | 3818 | 3817 | 3815 | 3818 |
| Individuals | 2397 | 2397 | 2396 | 2396 | 2397 |
| D 1D II 1.1 | 1°. IT 1 | | | | |
| Panel B: Health care ex | penditures [Log] Formal care | Informal care | Hospital stays | Total OOP | |
| | r Offinal Carc | imormai carc | 110spitai stays | 10tai 001 | |
| Treatment*Post | -0.120 | 0.024 | -0.013 | -0.100 | |
| | [-0.306,0.066] | [-0.038,0.087] | [-0.106,0.080] | [-0.299,0.099] | |
| Wave 2 | 0.841 | 0.227 | -0.145 | 0.975 | |
| | [0.219,1.463] | [-0.214,0.668] | [-0.384,0.095] | [0.231,1.718] | |
| Observations | 3818 | 3818 | 3818 | 3818 | |
| Individuals | 2397 | 2397 | 2397 | 2397 | |
| D 1C II 11: | . 1 | | | | |
| Panel C: Health insurar | Social security | Private HI | Public HI | Any HI | |
| | Social Security | rnvatern | r upiic 111 | 7111y 111 | |
| Treatment*Post | -0.006 | -0.000 | 0.042 | 0.031 | |
| | [-0.031,0.019] | [-0.008,0.007] | [0.016,0.068] | [-0.001,0.062] | |
| Wave 2 | -0.021 | -0.008 | -0.011 | -0.048 | |
| | [-0.086,0.043] | [-0.027,0.010] | [-0.075,0.053] | [-0.132,0.037] | |
| Observations | 3751 | 3751 | 3751 | 3751 | |
| Individuals | 2367 | 2367 | 2367 | 2367 | |

Note: 95% Confidence intervals are obtained using standard errors clustered at individual level. The coefficients are estimated with an individual fixed effect difference-in-difference models controlling for changes in age fixed effects, education years, marital status, household size, labour force status, chronic conditions, and number of limitations in daily living activities. Valladolid is the treatment village where the old-age pension program was implemented in December 2008. The models use data from the baseline and follow-up survey.