Department of Social Policy

Working Paper
January 2026

Caregiving Across Generations

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To cite this paper: Costa-Font, J., Orsini, C., Raut, N. (2025) Caregiving Across Generations. Social Policy Working Paper 02-2026, London: LSE Department of Social Policy.

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Abstract

We show that long-term care policy interventions can shape informal caregiving patterns across generations, producing intergenerational spillovers. Exploiting the exogenous, state-level decline in public funding for Medicare home health care following the implementation of the Interim Payment System (IPS) reform in the United States at the end of the 90s, we assess its effects on informal caregiving among both the directly affected and subsequent generations. Our findings indicate that reductions in Medicare home health care funding not only increased the provision of informal care to elderly parents by their adult children but also generated lasting intergenerational effects: decades later, the next generation became more likely to receive similar care from their own children and grandchildren. In addition, the IPS reform influenced other behaviors, including long-term care insurance and Medicaid take-up, inter vivos transfers, bequest intentions, and residential proximity within families.

Keywords: caregiving, role modelling effects, Medicare home health care, family ties, intergenerational spillovers, informal care.

JEL: I13, J14, Z1

1. Introduction

Policy interventions have the potential to influence family behavior across generations.[1] Elderly care—an activity strongly shaped by intergenerational norms in many societies (WHO, 2023)—is gaining prominence amid global population aging. In this context, it is crucial to examine how changes in policies governing formal care provision impact informal care within families.

We exploit the variation in the availability of formal elderly care resulting from a steep reduction in public funding for Medicare home health care in the United States at the end of the 1990s. Consistent with the hypothesis that formal and informal care are- at least in part- substitutes, we find that the cut in publicly funded home care led to an increase in informal care received by the elderly from their adult children (whom we refer to as generation 1). Importantly, we also uncover intergenerational effects: decades later, the policy shock affected informal care received by the next generation from their own children and grandchildren (both of whom we refer to as generation 2) when care needs arose.[2]

In the period under study, Medicare home health care could be prescribed by a physician to homebound elderly individuals independently of prior hospitalisation, making it a very popular service (10.7 per cent of Medicare beneficiaries used Medicare home health care in 1996, the year before the policy change we study here was implemented). Before the policy intervention we examine, Medicare home health care had effectively become a long-term care service for many elderly (Murtaugh et al., 2003). By 1996, 49% of Medicare home healthcare visits were carried out by home health aides, whose tasks include, for the most part, the provision of personal care services (See Figure 1). However, due to the cut in funding for Medicare home health care from 1997, home health care visits dropped dramatically, including visits carried out by home health

[1]For example, in the United States Hartley *et al.* (2022) find that a mother's participation in the aid to families with dependent children (AFDC) and temporary assistance for needy families (TANF) programs increased her daughter's odds of adult participation in such programs down the line. Similarly, Jacobs (2020) documents that the introduction of the Earned Income Tax Credit (EICT) program in the United States led to higher approval of women labour market participation; children whose fathers were eligible for paternity leave in Spain, exhibited more egalitarian attitudes towards gender roles and equal engagement in the labour market and in the home (Farré *et al.*, 2022).

[2] We specifically focus on home health care, a very common form of health care provided in the patient's home in many countries. For instance, recent data from a few developed countries suggest that home health care makes up more than a third of all long-term care spending in Lithuania and Austria and stands at around 20% in Ireland and Germany (OECD, 2020).

aides, which declined by 78.6%. (i.e., from 129.5 million in 1996 to 27.7 million in 2000, Health Care Financing Administration, 1998, 2002).

Because home health provides personal care that can be replaced by informal caregivers, we examine whether the sharp decline in home health visits following cuts to Medicare home health funding led to greater reliance on informal care from adult children. Caregiving duties are a core part of social norms in many societies, and informal care provided by family is one of the main sources of care worldwide (Norton, 2016). Hence, it is entirely possible that changes in the supply of informal care impact caregiving social norms. Although it is estimated that the economic value of unpaid caregiving exceeds that of nursing homes and paid home care budgets (Chari et al., 2015; Arno et al, 1999), we still know little about the motivations that drive individuals to supply adult care, and financial incentives such as the availability of publicly funded home health care may be important determinants of the decision to provide informal elderly care.

To identify the effect of public cuts in funding for home healthcare on informal caregiving across generations, we take advantage of a policy intervention that provides a unique quasi-experiment, namely the Interim Payment System (IPS) in the United States in the late 1990s. The IPS *imposed a cap* on the average reimbursement per patient that home care agencies (e.g., the providers of home health care) were entitled to receive when treating elderly Medicare patients. The cap was based on a blend of each home health agency's average per-patient cost in 1994 and the average per-patient cost of all home health providers in the agency's census division.[3] The cap was structured in a way that resulted in varying average reductions in public funding for Medicare home health care across states (See Section 2).

The multi-generational impact of this change in public funding for home health care on informal care provision merits further empirical study. Ex-ante, it is unclear what the sign and magnitude of the impact of declining formal care on informal care might be, because the literature on informal

[3] A Census division is a cluster of states. There are in total 10 Census divisions: New England (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont), Middle Atlantic (New Jersey, New York and Pennsylvania), East North Central (Illinois, Indiana, Michigan, Ohio, Wisconsin) West North Central (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota), South Atlantic (Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia), East South Central (Alabama, Kentucky, Mississippi and Tennessee), West South Central (Arkansas, Louisiana, Oklahoma, Texas), Mountain (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming), the Pacific division (Alaska, California, Hawaii, Oregon, Washington).

care reports both positive and negative aspects related to providing informal care to the elderly (van Durme et al., 2012). Although informal care provides the caregiver with a positive sense of self, caregiving requires an investment of time and energy, and it affects the caregiver's allocation of time to leisure and work. Additionally, the provision of care to frail elderly parents/parents-in-law means that caregivers spend time with people who are not well, and this direct exposure to suffering can impact caregivers' mental and emotional well-being.

Furthermore, the impact of the decline in publicly provided home care on the receipt of care for the next generation (generation 1) by their children/grandchildren is far from trivial. If generation 2 perceived the experience of caregiving by generation 1 to their elderly parents as negative, then generation 2 may not increase informal care to their elderly parents once they age and require care.

Our estimates suggest that the elderly living in states where the average decline in public funding for home health care due to the IPS reform was relatively large were more likely to receive informal care from generation 1 compared to those elderly living in states where there was a smaller average decline in public funding for home health care due to the IPS. We also find that in later years, as generation 1 aged and began to require care, individuals who had lived in states that experienced larger declines in public funding for home health care due to the IPS were more likely to receive informal care from their children and grandchildren. These findings suggest that the IPS influenced informal care behaviors across multiple generations. Notably, our results align with prior research demonstrating that intergenerational transmission of beliefs and behaviors can occur not only within families but also through peers' families. For instance, Olivetti, Patacchini, and Zenou (2020) show that a woman's labor supply as a young adult is shaped both by her own mother's employment behavior and by that of her adolescent peers' mothers. For the Netherlands, Dahl and Gielen (2021) find that children of parents whose disability insurance (DI) eligibility was reduced were 11 percent less likely to participate in DI themselves, did not increase their use of other government programs, and earned 2 percent more as adults.

Our paper contributes to the existing literature in several key areas. First, it extends the body of research on the impact of public interventions on intergenerational behavior, an area that is

rapidly growing but that has not addressed our specific research question. As such, this study is the first to document the causal impact of changes in public funding for long-term care on informal caregiving across generations. Moreover, the limited literature on the intergenerational transmission of caregiving (Charles et al., 2015) remains largely descriptive, highlighting the novelty and significance of our work.

Second, we add to the literature on the effects of the cuts in public funding for home health care on several outcomes. Studies that have used the IPS as an exogenous policy change have looked at: the impact of the IPS on home health care and other healthcare services received by elderly Medicare beneficiaries (McKnight, 2006); home ownership among the elderly (Engelhardt and Greenhalgh-Stanley, 2009); elderly living arrangements (Orsini, 2010); elderly mortality (Huckfeldt, 2014; Orsini, 2019); and home health care market structure (Orsini, 2016). Golberstein et al. (2009) look at the impact of the IPS on informal care received by unmarried elderly respondents in the Health and Retirement Survey (HRS). We also rely on HRS data to study caregiving across generations, which means that we need to focus on elderly individuals affected by the IPS and their reported receipt of informal care provided by their children/grandchildren, so our sample includes the elderly who have at least one child. In selecting our sample, we look beyond the sample of unmarried elderly, because not all unmarried elderly have children. This focus on the elderly with children differentiates our study population from the sample Golberstein et al. (2009) focus on. We provide further information on our outcomes and sample in Section 3.

Furthermore, we also study how the IPS impacted informal care for the following generations, leveraging the many years of HRS data now available. While the main focus of our analysis is informal care, we acknowledge that the IPS may have impacted the perception of insurance needs and the importance of family support. We therefore investigate how beliefs and other transfers between generations have been impacted by the IPS. We focus on inter-vivos transfers from generation 1 to generation 2, the likelihood that generation 2 lives within 10 miles of generation 1, the purchase of long-term care insurance by generation 1, generation 1's take-up of Medicaid, and generation 1's intention to leave a bequest. In doing so, we not only contribute to

the academic discussion on the incentives for the supply of informal care, but we also highlight that long-term care policies can trigger a host of behaviors across several generations.

2. Background: Medicare Home Health Care and the IPS

2.1 Medicare Home Health Care

Medicare was enacted by Congress in the United States in 1965 to meet the health insurance needs of the elderly and the disabled. During the period in which the IPS was implemented, Medicare consisted of three parts: hospital insurance, known as Part A; supplementary medical insurance, known as Part B; and Part C, which expanded beneficiaries' options to participate in private-sector health care plans. Medicare Part A is provided automatically and free of charge to people aged 65 or older who are eligible to receive Social Security or Railroad Retirement Benefits. Until 1997, Medicare Part A covered inpatient hospital care, short-term skilled nursing facility services, hospice care, and home health care. Since 1997, Medicare Part A has covered all home healthcare visits for individuals not enrolled in Part B. For individuals enrolled in Medicare Part B, Medicare Part A covers the first 100 home health care visits that follow an inpatient stay, and Part B covers visits above the limit imposed after the inpatient stay, as well as visits that are needed without a previous inpatient stay.

Importantly, in the years before the IPS was implemented, physicians could prescribe Medicare home health care to eligible individuals even without prior hospitalization, making the eligibility for the service quite broad. Medicare home health care covers six healthcare services: skilled nursing, physical therapy, occupational therapy, speech therapy, medical social work, and home health aide. To be eligible to receive Medicare home health care, Medicare beneficiaries need to be "home-bound" and in need of "intermittent" and "part-time" care. Such care can be substantial. Medicare defines part-time or "intermittent" care as the care needed or given on fewer than 7 days each week or less than 8 hours each day, with some exceptions for special circumstances, suggesting that a decline in Medicare home health care funding can substantially affect care received in the home for elderly beneficiaries. Medicare home health care providers are

agencies that employ staff to provide visits to patients' homes. Home care agencies must be certified by the Medicare program to be reimbursed for the care provided to Medicare patients.

2.2 The Policy Change

The Balanced Budget Act (BBA) of 1997 changed reimbursement for Medicare home health care. This congressional action followed several years of rapid growth in the number of elderly using the benefit and in the number of visits provided. This rapid growth was largely responsible for the 25 percent average annual increase in Medicare spending between 1990 and 1997 (Murtaugh et al., 2003). The large increase in the number of beneficiaries with many visits and the high proportion of those visits provided by home health aides (See Figure 1) raised questions on the compatibility of the *de facto* long-term care nature of Medicare home health care for many beneficiaries with the original focus of Medicare home health care as a skilled service (Murtaugh et al., 2003).

The reform involved two phases. First, from 1997 to 2000, an Interim Payment System (IPS) was established that put a cap on how much each home care agency would be reimbursed per patient per year. Home care agencies were reimbursed by the Medicare program on a cost basis before the IPS, with a maximum cost per visit that was quite generous, but there was no limit to the number of visits a provider could claim reimbursement for. The reimbursement limit introduced by the IPS created geographic and time variation in the severity of the reimbursement decline by the Medicare program. The cap each agency faced from 1997 had two components: 75 percent of the value was based on each home care agency's 1994 average per-patient cost, and 25 percent was based on the average per-patient cost of the home care agency's census division.[4] As a result of the way the cap was constructed, two home health agencies with similar per-patient costs before the IPS but located in different census divisions faced different reimbursement limits after the IPS if the per-patient costs in their census divisions were different[5].

[4] Please, refer to footnote 3 that illustrates the different Census Divisions.

[5] The reasoning applied to a home health agency in a state can be applied to the average of agencies in that state (McKnight, 2006).

The second phase of the reform started in October 2000, when the IPS gave way to the Prospective Payment System (PPS).[6] It is relevant to point out that the rules of the PPS did not vary by state, which means that the PPS generated time series variation but *did not* generate state variation in reimbursement generosity. Therefore, consistently with previous research looking at the impact of the change in funding for Medicare home health care in 1997 (for example, See McKnight, 2006; Golberstein et al., 2009; Engelhardt and Greenhalgh-Stanley, 2010; Orsini, 2010; Orsini, 2019), we concentrate on using the time and state variation introduced by the IPS to study changes in caregiving provision across generations.

The drop in the provision of Medicare home health care following the IPS was large: the fraction of Medicare beneficiaries who used the service went from 10.7 percent in 1996 to 8.5 percent in 1999. Also, between 1996 and 1999, the average number of home health care visits per user almost halved, declining from 74 to 42. It is also worth noting that Medicaid provides dual beneficiaries[7] with some home visits, including personal care visits.[8] However, data on the receipt of home health care by the elderly during the IPS does not suggest that Medicaid coverage compensated for the decline in Medicare home health care. In fact, Orsini (2011) using National Health Interview Survey aggregate data shows that the fraction of elderly Medicaid–Medicare dual enrolees that received home care visits between 1998 and 2001 decreased by 17.97 percent, compared to a 15.91 percent decline in the fraction of Medicare-only beneficiaries that received home care, remarkably similar numbers, suggesting that it is unlikely that Medicaid policies had a balancing effect on the decline in visits received by the elderly as a consequence of the IPS.

[6] Under PPS, a home care agency receives a single payment for all items and services furnished during each 60-day episode of care. The payment rate is based on the national average cost of providing care in 1997, rather than on the actual cost of home health agencies. To account for differences in beneficiary needs, PPS reimbursements are adjusted from a base rate.

[7] Dual beneficiaries are elderly who are eligible for Medicare as well as Medicaid because their income is below a given threshold.

[8] By federal mandate, states are required to provide Medicaid home health services to persons entitled to receive skilled nursing services under the state's Medicaid plan. These services include skilled nursing, home health aid, medical equipment and appliances to be used in the home. Moreover, states have the option of providing additional services like physical therapy, occupational therapy, speech pathology, and audiology services (United States House of Representatives, 2004). Medicaid regulations allow states to provide home and community-based services under two programs: personal care services and home and community-based waiver programs. Since 1975, states have the option of providing personal care services that include help with bathing, dressing, eating, toileting, personal hygiene, light housework, laundry, meal preparation and grocery shopping. By 1998-1999, 26 states offered personal care services (Le Blanc et al.,2001).

3. Data and Sample Description

3.1 Data

The data we use in our estimates mainly come from the Health and Retirement Study (HRS). The HRS is a nationally representative longitudinal survey of individuals (both respondents and their spouses) who were 51-61 years old in 1992. We believe that the HRS is the most suitable data set to use for our analysis, as it collects information on the supply and demand of long-term care services, as well as informal care received by the elderly. The HRS also provides data every 2 years since 1992, a period long enough to allow us to study informal caregiving across generations. We use the restricted version of the HRS that includes state identifiers.

We study two different segments of the HRS data. First, we use data from 1994 through 2000 to identify the impact of IPS on informal care received by the elderly and provided by their children. When studying the first segment of the sample, we limit respondents to those above the age of 65 (1994-2000). This is because 65 is the age at which most elderly individuals are eligible for Medicare provision in the United States. Respondents aged 65 or above were directly affected by the IPS. Based on our outcome of interest, we also limit the sample to those respondents who have at least one living child below 65 years of age during the IPS and, therefore, are not directly affected by the IPS. We stop the analysis of the first period in the year 2000, because the IPS ended in 2000. In this part of the analysis, we also use data from the Assets and Health Dynamics of the Oldest Old (AHEAD), a prospective panel survey of persons born in 1923 or earlier who were residing in the community at the time of the baseline survey. AHEAD was a separate survey from the HRS at baseline, but it subsequently merged with the HRS.

Next, using HRS waves from 2010 through 2018, we investigate caregiving received by generation 1 from generation 2. In this part of the analysis, generation 1 is selected as the group of individuals who *were not* 65 years of age or older during the IPS, who had elderly parents alive during the IPS, and who have at least one child. In this paper, when we refer to “children,” we include children as well as children in law.

We selected the second segment of the sample to start in 2010 to allow generation 1 to age enough to have a sufficiently large sample size for estimating the impact of the IPS on receiving care later in life from generation 2.

3.2 Outcomes of interest

Regarding the main outcome variable, we measure caregiving at the intensive margin. The HRS asks respondents whether they have any Activity of Daily Living (ADL) and Instrumental Activity of Daily Living (IADL) limitations and who helped with each limitation.[9] Our outcome variable is a dummy equal to 1 if the respondent replied that a child helped with any ADL or IADL in the first segment of the sample, and a dummy equal to 1 if the respondent replied that a child/grandchild helped with any ADL/IADL in the second segment of the sample. The HRS also includes a variable measuring respondents' assessment of the number of days per week and hours per day respondents received care for each limitation. We decided not to use these measures at the intensive margin as they are likely to contain considerable measurement error.

When considering the second segment of the sample, we also look at other relevant outcomes to gain a more complete picture of the impact of the IPS over the longer run. First, given the large decline in the provision of Medicare home health care with the IPS, it is possible that those of generation 1 in states relatively more impacted by the IPS became relatively more aware of the importance of health insurance, and this, in turn, may have prompted them to seek long-term care insurance coverage. We consider two outcomes in this respect: Medicaid coverage and private long-term care insurance coverage. Medicaid in the US provides health insurance to eligible individuals who satisfy the income requirement, and the insurance includes coverage for some forms of home care, as well as institutional care. In general, Medicaid take-up is estimated to be well below 100% (Borella et al, 2018). Since Medicaid eligibility is income-related, and some elderly might not qualify, we also investigate whether respondents report long-

[9] In the Health and Retirement Study (HRS), a self-reported Activities of Daily Living (ADL) limitation means a participant has difficulty with at least one of the following activities: walking, bathing, getting dressed, using the toilet, getting in/out of bed, or eating. Instrumental Activities of Daily Living (IADLs) include difficulties grocery shopping, preparing meals, managing money, making telephone calls, using a calculator, using a microwave, and driving.

term care insurance coverage. Although the private market for long-term care insurance is limited (Brown and Finkelstein, 2011), it is not non-existent, so it makes sense to consider the ownership of private long-term care insurance as one of our outcomes.

We also study the stated probability that generation 1 leaves a bequest to generation 2 as an outcome, as well as monetary transfers from generation 1 to generation 2 during 2010-2018. There are several non-competing reasons to expect that the IPS might have impacted inter-vivos transfers and the stated probability that generation 1 will leave a bequest to generation 2. The IPS might have increased the belief that financial resources are needed in old age, prompting generation 1 to increase the transfer of money to their children (generation 2) for their (generation 2 and 1) care needs. Also, the increased intention to leave a bequest and the increase in financial transfers from parents to children can be seen as an incentive for generation 2 to provide care when generation 1 needs it. The literature suggests that this interpretation is a possibility. For example, Groneck (2017) uses exit interviews in the HRS and finds that children who provided relatively more care to their elderly parents received larger bequests compared to their siblings. Our analysis complements this literature by showing that a long-term care policy change can trigger changes in inter-vivos transfers and the stated intention to provide a bequest/financial transfer to children. Finally, to the extent to which the IPS increased the perception that children must provide informal care to their elderly parents when needed, it is worth investigating whether adult children decided to live closer to their parents as a consequence of the IPS. We therefore include as an outcome a dummy equal to 1 if generation 1 respondents report having children living within 10 miles of their residence.

3.3 Summary Statistics

Table 1 displays summary statistics for the two segments of the sample in Panel A and Panel B, respectively. Table 1 reveals that women are more likely than men to receive informal care from children and that single respondents are more likely to receive care from children than married respondents, perhaps because the spouse is available to provide care to married respondents. Furthermore, Panel A also shows that respondents are more likely to receive care

from their children when they have more than one child. Finally, Panel B shows that lower-educated individuals (those with a level of education equal to high school or lower) are more likely to receive care from their children/grandchildren than individuals with at least some college education.

4. Empirical Strategy

4.1 Cross-State Variation in the Policy Change

The new reimbursement rules for Medicare home health care introduced by the IPS meant that states with similar increasing trends between 1994 and 1997 could face different Medicare reimbursement limits after the IPS. For example, 2 states with the same pre-IPS average use of Medicare home health care but where the average per patient cost of home health agencies in their census division in 1994 were different, faced different Medicare home health care reimbursement limits after 1997.

We use the same measure used by McKnight (2006) to capture a cross-state component of the state variation implied by the IPS and identify the average number of visits per user as the most appropriate measure of cost to use. More formally, McKnight (2006) defines the following measure of restriction in reimbursement generosity:

$$\text{Restrictiveness}_{sc} = \bar{A}_S - \bar{A}_C \qquad (1)$$

Where $\bar{A}_S$ is the average number of Medicare home care visits per user in 1994 in state s, and $\bar{A}_C$ is the average number of Medicare home care visits per user in 1994 in state's census division. It is worth noting that the restrictiveness measure is a relative number, hence it gives a measure of *relative* restriction of the policy. As other research has mentioned (for instance, McKnight, 2006), all states were restricted by the policy because the limit imposed by the IPS was calculated on utilization in 1994, and home health care utilization increased in all states from 1994 to 1997. Indeed, there was a decline in the provision of Medicare home health care measured by Medicare home health visits per user in all states after the implementation of IPS. The decline in the provision of formal home health care was *more pronounced*, however, in those states that were relatively

more restricted by the IPS, hence those with a relatively higher restrictiveness measure. The restrictiveness measure ranges between -40.9 (Kentucky) and 34.7 (Utah).[10]

To illustrate that states with a relatively high restrictiveness measure faced a relatively higher drop in Medicare home health care use, Figure 2 shows that the relative decline in the provision of Medicare home health care was more pronounced in states that were relatively more restricted by the IPS compared to states that were relatively less restricted. To construct Figure 2, we divide states into two groups: one group is composed of relatively more restricted states (those with a Restrictiveness measure>=0), and another group is composed of relatively less restricted states (those with a Restrictiveness measure<0). Figure 2 shows four facts. First, in all states, there was an increase in Medicare home health care utilization between 1994 and 1997. Moreover, the trends over this period were very similar in the two groups of states. Also, all states experienced a decline in utilization in the post-policy period. Finally, the drop in visits per user was much more severe for the highly restricted states. Figure 2 is an approximate visual representation of the difference-in-differences estimation strategy used by McKnight (2004, 2006) to study the impact of the IPS on the number of home care visits received by Medicare beneficiaries. We use the same identification strategy to study the impact of the IPS on the provision of care by generation 1 to their elderly parents/parents-in-law. We also use the restrictiveness measure in our empirical strategy when we measure the impact of the IPS on caregiving from generation 2 to generation 1. Both strategies are more formally illustrated below. In the rest of the paper, we interpret all our estimates as the impact of the decline in reimbursement of one visit per user on the outcome of interest.

[10] Because the cap was calculated on Medicare home health care utilization in 1994 and because all states experienced a rapid increase in average Medicare home health care utilization between 1994 and 1997, even states where the restrictiveness measure is negative faced- on average-a restrictive reimbursement limit after the IPS.

4.2 Difference-in-Differences Specification: the impact of the IPS on the receipt of informal elderly care

Equation 2 below is estimated on the first segment of the sample introduced in Section 3 using data between 1994 and 2000 and presents the difference-in-differences strategy that compares changes in informal care by generation 1 received by the elderly impacted by the IPS in states that faced a relatively restricted reimbursement by the IPS with changes in the receipt of informal care received by the elderly in states that were less restricted by the IPS:

$$y_{ist} = \alpha + S_s + Year_t + S_s t + Post_t \beta + Post_t * Restrictiveness_{sc} \gamma + X_{ist} \delta + e_{ist} \quad (2)$$

y_{ist} is a dummy equal to 1 if the respondent i living in state s reported receiving care from generation 1 in year t as defined in Section 3; S_s and $Year_t$ are year and state fixed effects, and $S_s t$ are linear state trends. $Post_t$ is a dummy equal to 1 for years 1998-2000 in which the IPS was in place (McKnight, 2006) and 0 otherwise. $Restrictiveness_{sc}$ captures the state variation in the IPS as defined in section 4.1; X_{ist} are individual-level variables, such as: a dummy equal to 1 if the respondent is male, and a dummy equal to 1 if the respondent is white-non Hispanic; $e_{ist}$is the individual error term. We cluster the standard errors at the state level (Bertrand, Duflo, Mullainathan, 2004). We use person-level survey weights for all our estimates.

In Figure 2, we plot estimates from an outcome event study version of equation 1 where we interact the Restrictiveness measure introduced in section 4.1 with the year dummies, with year 1996, the year before the IPS, as the reference point. Figure 1 shows that only after the implementation of IPS are the estimates of these interactions positive and statistically significant. Figure 1 also shows that there is a jump in the point estimates of the interaction of the year dummies and the Restrictiveness measure from 1998, the year after the IPS was implemented, compared to the baseline.

The estimate of γ in equation 2 allows us to recover the impact of a decline in reimbursement for one visit per user on the outcomes we consider, which is a rather intuitive parameter from a policy perspective. We start by noticing that the point estimate of γ in Equation 2 represents the impact on the outcome of an increase equal to 1 in the Restrictiveness measure. Because the state variation in the decline in Medicare home health care reimbursement rests on

the portion of the cap (25%) related to the census division utilization, γ can be interpreted as the impact of the decline in reimbursement for 0.25 visits per user on the outcome variable. To recover the impact of a decline in reimbursement of one visit per user on the outcome variable, one needs, therefore, to multiply the point estimates of γ by 4 (See McKnight, 2006).

4.3 Transmission of Caregiving Across Generations and Other Relevant Outcomes

Equation 3 below presents the regression specification for the transmission of caregiving across generations and the other relevant outcomes introduced in section 3.2 using HRS data from 2010 to 2018. In 2010, the sample we consider of generation 1 had parents who faced the sudden drop in public funding for Medicare home health care due to the IPS in 1997-2000. When considering informal care, we focus on the informal care received by generation 1 from generation 2 (as defined in section 3) and investigate how such care varied depending on the severity of the IPS restrictions generation 1 was exposed to during the IPS. The regression specification is as follows:

$$y_{ijt} = \alpha + S_j + Year_t + S_j t + \rho\ Restrictivenesss_{sc} + \delta\ Restrictiveness_{sc} * Caregiver_i + \beta\ Caregiver_i + +e_{ijt}$$

(3)

y_{ijt} is a dummy equal to 1 if individual i in a state j, in year t (the state is the state in which the respondent was living during years 2010-2018) received care from generation 2, or is one of the outcomes described in Section 3.2; S_j and $Year_t$ are year and state fixed effects, and $S_j t$ are linear state trends. $Restrictiveness_{sc}$ is a measure assigned to the state where the generation 1 *individual was living during the IPS*.[11] β estimates the different intercept for those of generation 1 who provided care to their elderly parents when the IPS was enacted, as $Caregiver_i$ takes the value '1' if a respondent provided care to their parents during the IPS reform. δ tests whether the impact of the IPS on care received by generation 1 and provided by generation 2 varied differentially

[11] Since the IPS lasted for 3 years, to assign the state an individual was living in during the IPS we checked whether during the IPS respondents were likely to move states. Although in our sample we have a small number of individuals who changed state during the IPS, our estimates are unchanged if we exclude them.

depending on whether the generation 1 respondent provided care to their parents during the IPS. As was the case for equation 2, to recover the impact of a decline in reimbursement for one visit per user, one needs to multiply the point estimates of ρ in equation 3 by 4.

5 Results

5.1 Main estimates: the elderly's receipt of care provided by Generation 1

Results from estimating the impact of the IPS on the elderly's receipt of care from generation 1 (estimates of equation 2) are reported in Table 2. The results from column 2 of Table 2, the specification that includes all control variables, indicate that a decline in reimbursement of one visit per user increased the likelihood that the elderly received care from generation 1 by 1.36 (0.34*4) percentage points. Since Table 1 reports that 60 percent of respondents provide care to their parents in this period, the point estimate implies that a decline in reimbursement of one visit per user led to an average increase in the receipt of care by the elderly from generation 1 equal to 2.28 percent.[12] We conduct the calculation of the other estimates in the same way.

We next study the possibility that the IPS might have had a heterogeneous effect on different subsamples and report the resulting estimates from this exercise in Table 3. We estimate equation 2 by gender, marital status, race/ethnicity, and number of children. When considering estimates by gender in columns 1 and 2 of Table 3, the point estimate of γ in equation 2 for the sample of female respondents implies that a decline in reimbursement equal to 1 visit per user increased the fraction of elderly women who received care from generation 1 by 2.15 percent.[13] Differently, the point estimate for elderly males is non-significant at conventional levels. This result could be due to the much smaller sample size of elderly men (1638) compared to the sample size for women (3325), which, in turn, is likely due to demographics because men tend to die younger than women. Despite the lack of statistical significance of the policy parameter for the sample of men, the 95% confidence interval of the estimate for men [-0.0006, 0.006] overlaps with the 95% confidence interval for the estimates for women [0.00174, 0.00566], so in this sample, we cannot

[12] (100/60)*0.34=0.57. 0.57*4=2.28. Please, refer to section 4.2 for a description of this calculation.
[13] (100/69)*0.37=0.536; 0.536*4=2.15%. The other percent estimates in this section are similarly calculated.

rule out that the two point estimates are not dissimilar. Results for married elderly individuals (estimate in Table 3, column 5)- statistically significant at the 10 percent level- suggest that a decline in reimbursement of one visit per user increased the fraction of married individuals receiving care from generation 1 by 3.11 percent, whereas the estimate for the sample of unmarried individuals is equal to 1.4 percent. A possible explanation for these findings is that unmarried individuals, being without a spouse, already relied more on informal care from children before the IPS compared to married individuals, making the scope for an extensive increase in informal care in the years immediately following the start of the IPS relatively small. A closer scrutiny of the data reveals that this interpretation is plausible, because before the IPS 29 per cent of married individuals received care from their children, compared to 69 percent of unmarried elderly. After the IPS, 44 percent of married individuals received care from their children, and 80 percent of unmarried individuals did so.

Given that in the US health behaviours and health outcomes vary along race and ethnicity dimensions (see, for example, Nndugga and Artiga, 2023) and that the HRS includes some information on race and ethnicity, we estimate equation 2 on the sample of white, non-Hispanic respondents (Table 2, column 4), and on the sample of all others. Results in Table 3 indicate that for white non-Hispanic respondents, a decline in reimbursement equal to 1 visit per user caused an increase in informal care receipt equal to 1.3 percent, and equal to 4.2 percent for all other groups, so the two estimates are quite different, and in this paper, highlighting these differences is our contribution. However, given the coarse grouping used when estimating equations by race/ethnicity, more research is needed to understand the informal care responses to changes in public funding for home health care by race/ethnicity.

Table 3 also looks at whether the effect is heterogeneous by the number of children the elderly have. Table 3, in columns 3 and 4, shows that the IPS increased the fraction of elderly with only one child receiving care from generation 1 by 2.98%, whereas it increased the fraction of elderly with more than one child receiving care from generation 1 by 2.03%, with the estimates for elderly with only one child significant at the 10% level. The confidence intervals of these two estimates

overlap, so the impact was likely not very different for the two groups.[14] The higher precision of the estimate for the sample of individuals with more than one child could be due to the larger sample size for this group compared to the group of individuals with only one child (830 for individuals with one child, and 4110 for individuals with more than one child).

5.2 Main Estimates: transmission of caregiving across generations

In this section, we examine the results from estimating equation 3 on the second segment of the sample-the segment that includes data from 2010 through 2018. We test whether those of generation 1 who were exposed to more severe cuts in reimbursement generosity of Medicare home health care during the IPS were likely to receive different informal care from generation 2, compared to individuals in generation 1 who, during the IPS, were exposed to relatively less severe cuts in reimbursement generosity of Medicare home health care. Generation 2 saw what happened to the elderly affected by the IPS, as well as witnessed the informal caregiving behavior provided to the elderly by generation 1. Generation 1 included generation 2's parents, as well as the extended family, as well as parents of generation 2's peers. Table 4 reports our results.

The most conservative estimate of ρ in Equation 3 in Table 4, column 2, suggests that generation 1 individuals who were living in states where cuts to Medicare home health care were relatively more severe during the IPS were also more likely, many years later, to receive informal care from generation 2 once they became old and needed care. As our results in the previous section have shown, when cuts introduced by the IPS were relatively more severe, the elderly were more likely to receive care from generation 1, so overall, our results indicate that the IPS, on average, increased informal care for the elderly across several generations.

Results in Table 4 suggest that a decline in reimbursement of one visit per user increased the fraction of respondents who receive informal care from their children or grandchildren by 25.1 percent (Table 4 in column 2). Table 4 also reports the coefficient estimate of the variable "caregiver" which is equal to 1 if the respondent during the years 1997-2000 provided care to her/his

[14] For the elderly with only one child, the confidence interval of the point estimate in Table 3 is [-0.006, 0.0088], and it is equal to [0.00944, 0.00526] for the elderly with more than one child.

elderly parents/parents in law, and it also reports estimates of the interaction between the variable "caregiver" and the restrictiveness measure. This interaction investigates whether the impact of the IPS on the respondent receiving care from generation 2 varies depending on whether generation 1 provided care to their parents in the past. When looking at the estimate of this interaction in column 1 of Table 4, we find this interaction to be not statistically significant at conventional levels, and the point estimate (-0.0024) is small: the 95 percent confidence interval implied by these estimates is equal to [-0.00514, 0.000344], with estimates of the extremities that are one order of magnitude smaller than the main estimates, suggesting that the IPS unlikely had a differential impact on the care received by those who were direct caregivers to their elderly parents in the past. This result supports the interpretation that direct family transmission via the parents is not the only mechanism at play when it comes to behavioral transmission across generations, and people who were young during the IPS likely witnessed an increase in informal care to the elderly from their parents as well as informal care provided by their extended family or their peer's parents. Since, on average, the IPS increased care received by the elderly from generation 1 and it did so relatively more in those states where the cuts were more severe, generation 2 with extended family and peers in those states that were relatively more impacted by the IPS cuts likely witnessed a relative more pronounced increase in care provision to the elderly during the IPS from their extended family and the family of their peers than generation 2 with family and peers in states where cuts were less severe. Our estimates of the impact of the IPS on care receipt are larger for years 2010-2018 compared to the estimates 1994-2000, results that are consistent with the interpretation that the combination of parental, extended family, and peer' parents' caregiving behaviour magnified over time the exposure of generation 2 to caregiving provided by the previous generation. This heightened exposure to increased caregiving provided by generation 1 plausibly cemented over time the perception in generation 2 of the need to provide informal care to the elderly, likely leading to a multiplier-type effect on caregiving behavior by generation 2 many years later.[15]

[15] The literature has found evidence of multipliers in various domains, including, to mention a few: labor force participation (Maurin and Moschion, 2009), crime (Bernasco et al, 2017), sexual behavior (Fletcher, 2007), and tax evasion (Galbiati and Zanella, 2012).

Table 5 displays estimation results from equation 3 for different subsamples. We first consider heterogeneous estimates by gender. For the sample of women, a decline in reimbursement of 1 visit per user implies an increase in the fraction receiving care from generation 2 by 29.32%, and an increase in the fraction of men receiving informal care from generation 2 equal to 12.76%. The estimate for men is significant at the 10 percent level, whereas the estimate for women is more precise. It is well known that women live longer than men, so it is not surprising to see that the women's sample size is larger than the men's sample size (Table 5). At first glance, this difference in sample size may seem one of the reasons why, in column 1 of Table 5, we find a precise effect of the IPS on the fraction of elderly women receiving informal care from their children/children-in-law/grandchildren, but a less precise result for men. However, closer scrutiny of the point estimates reveals that the 95% confidence intervals for the sample of women and men are, respectively, [0.043,0.051] and [-0.00058, 0.021]. These confidence intervals do not overlap, suggesting that care receipt is likely different for these two groups. In principle, two non-competing explanations may account for the observed differences between the estimates on the samples of women and men. The first relates to gender norms: male respondents may report a lower likelihood of receiving informal care from their children (generation 2) because they are more likely to receive care from their spouses. Since women have traditionally assumed caregiving roles, the residual need for informal care from children is likely less pronounced for men than for women. A second, demographic explanation stems from differences in longevity and age gaps within couples. Husbands tend to be older than their wives, and men generally have shorter life expectancies, resulting in a smaller pool of potential spousal caregivers for women. Consequently, it is plausible that women are more likely than men to need to depend on care provided by their children.

When considering the results by marital status, in columns 7 and 8 of Table 5, the point estimate for the sample of unmarried individuals is positive and precise and suggests that a decline in reimbursement of one visit per user increased the fraction of unmarried elderly of generation 1 receiving care from generation 2 by 41.13 percent. Conversely, estimates on the sample of married individuals are not precisely estimated, and the 95% confidence intervals of the estimates for

married and unmarried individuals do not overlap[16], suggesting a different response for these two groups.

Columns 3 and 4 of Table 5 show our estimates by respondent's level of education. We find that the point estimates and percentage effects for those with a level of education equal to high school or less and those with at least some college are very different: a decline in reimbursement of one visit per user increases the fraction of those elderly with a level of education equal to high school or below receiving care from generation 2 by 29.58%. The point estimate for respondents with at least some college is not significant, and the 95% confidence interval of this estimate is [-0.0072, 0.0026], which includes values that are one order of magnitude lower than the point estimates for people with a level of education equal to high school or less, suggesting that the impact was different for the two subsamples. This result may stem from differences in long-term care insurance coverage: 9.1 percent of higher-educated elderly individuals hold such insurance, compared with 4.1 percent among those with a high school education or less, allowing the former to rely more on insured care.

When performing the analysis by race/ethnicity, results reported in Table 5, columns 5 and 6, show that a decline in reimbursement of 1 visit per user increased the fraction of white, non-Hispanic respondents who received care from generation 2 by 30.19%. For all other groups, the corresponding estimate is equal to 16.92%. These numbers represent large differences in the responses by race/ethnicity. It is also worth noticing that the estimate for the sample of white, non-Hispanic respondents is significant at the 10% level, and it is precise for the group of all other respondents. A possible explanation behind the relatively more imprecise estimate for the sample of white, non-Hispanic respondents is the large heterogeneity within this group. As was the case for our estimates for years 1994-2000 presented in Section 5.1, our contribution rests on highlighting these differences by race and ethnicity, as the sample size by group is too small to reveal further heterogeneity for individuals who are not white, non-Hispanic.

[16] The confidence intervals of the estimates for married and unmarried individuals are, respectively, [-0.0079, 0.0042] and [0.0679, 0.0781].

Overall, these results suggest that the IPS influenced informal care beyond the immediate effect it had during the 3 years in which it was in place, showing that even a relatively short-term long-term care policy can trigger large changes in informal care norms across several generations.

5.3 Other Relevant Outcomes

In this section, we draw a more complete picture of the impact of the IPS on behaviour across generations by estimating equation 3 on several other outcomes: insurance take-up, inter-vivos transfers, bequest intentions, and proximity in living arrangements.

The first two outcomes we consider are generation 1's Medicaid and long-term care insurance coverage. In Table 6, column 5, we find that a decline in reimbursement of one visit per user increased the fraction of generation 1 purchasing long-term care insurance by 36.7%. Given the large decline in the public provision of home health care with the IPS, generation 1 likely increased their awareness of the importance of long-term care insurance in general, and even if they ended up not having enough resources to purchase long-term care insurance in the private market, those who were eligible increased their take-up of Medicaid (column 4, Table 6). Our estimates suggest that a decline in reimbursement of one visit per user increased the fraction of generation 1 taking up Medicaid health insurance coverage by 35.2% (column 4, Table 6).

Table 6 reports the estimates of the parameter of interest in equation 3 when the outcome is financial transfers from the elderly to their children, either actual or forecasted. Estimates in column 1 of Table 6 imply that a decline in reimbursement of one visit per user increased the likelihood of transferring money to children by 72.91% percent, whilst estimate in column 3 suggests that a decline in reimbursement of one visit per user increases the probability that respondents in generation 1 state that they are likely to provide a bequest of $10,000 or more by 89.44%. These financial transfers to children might derive from generation 1 being grateful for the care received by rewarding generation 2 with immediate and deferred monetary gifts, but also, bequest intentions may signal incentives to children to provide care when needed, in line with findings from previous research (Groneck, 2017).

Finally, estimates reported in column 2, Table 6, look at the likelihood that generation 2 lives less than 10 miles from their parents. The point estimate suggests that a decline in reimbursement of one visit per user increases the fraction of children who live within 10 miles of generation 1 by 39.52%.

5.4 Conclusion

We study the intergenerational effects of changes in public financing for formal care. Exploiting the reduction in Medicare home health funding under the 1997 Interim Payment System (IPS), we estimate its impact on elderly individuals' reliance on informal care. We further assess whether exposure to the IPS increased the likelihood that affected cohorts later received informal care from their children and grandchildren. We find that the IPS not only increased informal care received by the elderly directly affected by the policy, but it also led to increased care from children and grandchildren among those who witnessed deeper cuts earlier in life. These results highlight that short-term policy changes, such as the IPS, can have long-lasting, cross-generational effects that are often overlooked in policy evaluations. Although this paper focuses on the effects of cuts in publicly provided home health care on informal care, we document evidence of related impacts of the IPS on other actual or predicted family transfers, such as inter vivo transfers, and the forecasted likelihood of leaving a bequest, as well as family proximity. Furthermore, we find that the IPS led to an increase in the uptake of both Medicaid and private long-term care insurance, suggesting behavioral responses across generations to changes in public financing for long-term care. These responses may have long-term budgetary implications extending beyond the generation initially targeted by the policy.

Acknowledgements: We wish to thank the Wellcome Trust for funding this project via the British Academy Small Grant Scheme (Grant number SRG2324/241157) . We thank participants in the 2024 edition of the Healthy Ageing and Caregiving Workshop and the Social Policy Quantitative Reading Group at the LSE, as well as Winnie Mughogho, Pauline Pearcy, and Helena Hernandez Pizarro, for their careful reading of the manuscript and insightful comments. Winnie Mughogho provided excellent research assistance. We also thank participants at: the Society of Economics of the Household (SEHO) annual meeting, the London Health Economics Group (LHEG) seminar, Applied Health Economics and Policy Evaluation (AHEPE) workshop, the European Health Economics Association (EUHEA) annual meeting, the European Society of Population Economics (ESPE) annual meeting, the Barcelona Summer Forum, and seminar participants at the University of Pavia for their constructive comments. All errors are our responsibility.

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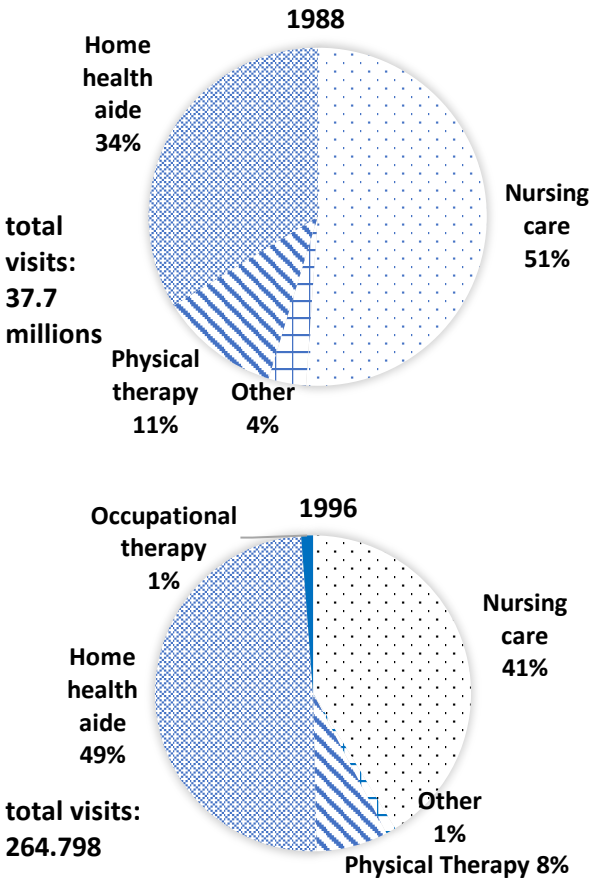
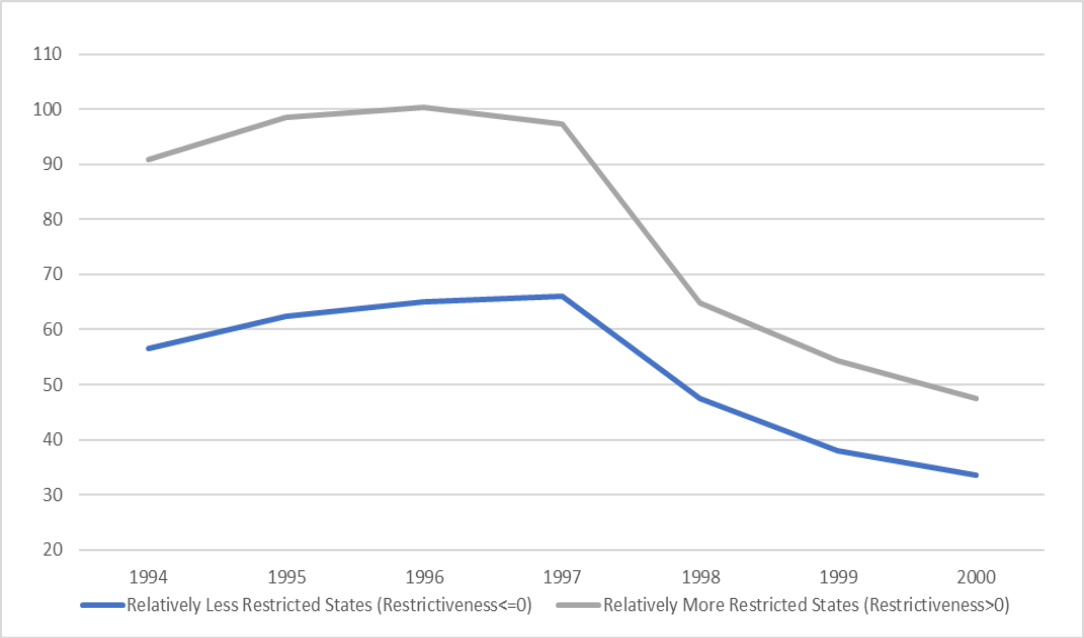
Figures

Figure 1: Percent Distribution of Medicare Home Health Visits, 1988 and 1996



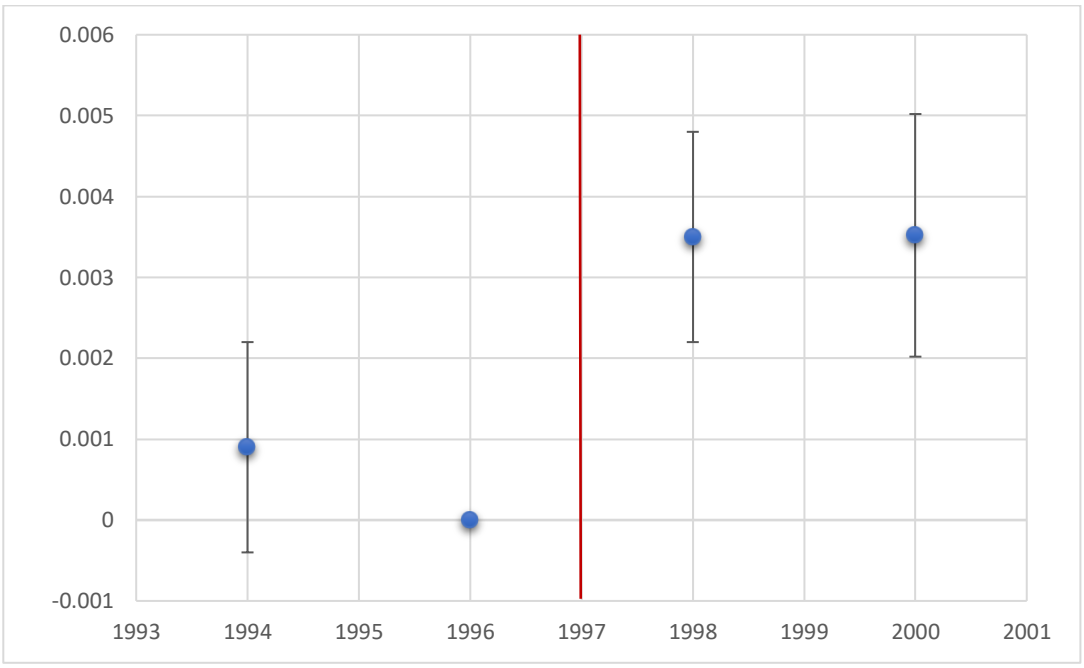
Source: The figure above shows how different types of Medicare home health care visits were distributed in the years 1988 and 1996, the year before the IPS was implemented, Health Care Financing Review, Medicare and Medicaid Statistical Supplement, various years.

Figure 2: Medicare Home Health Care Visits per User 1994-2000



Source: Health Care Financing Review, Medicare and Medicaid Statistical Supplement, various years. To construct the figure, we divide states into two groups: those where the IPS implied a relatively more substantial decline in Medicare home health care financing (i.e., those states where the restrictiveness measure defined in section 4.1 was <0) and those where the IPS implied a relative less pronounced decline in Medicare home health care financing (i.e., those states where the Restrictiveness measure defined in section 4.1 was >0).

Figure 3: Event Study: Effect of the IPS on the receipt of informal care, 1994-2000



Note: Plotted estimates come from an event-type version of equation 2 in the main text, and the baseline is the year 1996, the year before the IPS. The vertical line indicates the year in which the IPS was introduced. Estimates are every 2 years because the HRS is conducted every two years. The figure above plots coefficient estimates and 95 percent confidence intervals for year dummies interacted with the Restrictiveness measure introduced in section 4.1.

Tables

Table 1: Summary Statistics

***PANEL A*: HRS Sample: 1994 - 2000**			
Variable	**Observations**	**Mean**	**SD**
Received care from children	4,963	0.60	0.49
Received care from children (female respondent)	3,344	0.69	0.46
Received care from children (male respondent)	1,619	0.41	0.49
Received care from children (respondent is white non-Hispanic)	3,791	0.60	0.49
Received care from children (respondent is not white or is white Hispanic)	1,172	0.60	0.49
Received care from children (respondent has only one child)	830	0.55	0.49
Received care from children (respondent has more than one child)	4110	0.61	0.49
Received care from children (respondent is single)	3,082	0.74	0.43
Received care from children (respondent is married or with partner)	1,864	0.36	0.48
Respondent has one child	4,110	0.61	0.49
Respondent has more than one child	830	0.55	0.50
Age	4,963	80.5	7.5
Male	4,963	0.33	0.47
Married	4,946	0.38	0.49
White non-Hispanic	4,963	0.76	0.39
***PANEL B*: HRS Sample: 2010 - 2018**			
Variable	**Observations**	**Mean**	**SD**
Received care from generation 2	2,644	0.54	0.5
Received care from generation 2 (female respondent)	1,845	0.64	0.48
Received care from generation 2 (male respondent)	799	0.32	0.47
Received care from generation 2 (respondent is married or with partner)	1,192	0.33	0.47
Received care from generation 2 (respondent is single)	1,478	0.71	0.46
Received care from generation 2 (respondent has education equal to high school or less)	1,880	0.58	0.49
Received care from generation 2 (respondent has at least some college)	764	0.43	0.5
Received care from generation 2 (respondent is white non-Hispanic)	1,920	0.49	0.5
Received care from generation 2 (respondent is not white, or is white Hispanic)	724	0.66	0.47
Received care from generation 2 (respondent is single)	1,478	0.71	0.45
Received care from generation 2 (respondent is married or with partner)	1,192	0.33	0.47
Age	2,644	74.5	6.0
Male	2,644	0.3	0.46
Married	2,670	0.45	0.5
At least some college education	2,644	0.29	0.45
Money Transfer to Children	1,924	0.23	0.42
Has Private-Long Term Care Insurance	2,558	0.11	0.31
Has Medicaid	2,600	0.25	0.43
White (non-Hispanic)	2,644	0.73	0.45
P(leaving a bequest equal to $10k or above)	1,927	0.43	0.5

Panel A reports summary statistics for the sample of HRS respondents from 1994 to 2000; Panel B reports estimates for HRS respondents for 2010-2018. Please refer to section 3 in the main text for a detailed explanation of the samples.

Table 2: Impact of the IPS on the provision of care to parents and/ parents-in-law (generation 1 providing care), years 1994-2000

	Received Care from Children/Grand Children	
	(1)	(2)
Restrictiveness*Post	0.0037***	0.0034***
	(0.0011)	(0.0010)
	[2.46]	[2.28]
State FE	Yes	Yes
Year FE	Yes	Yes
Controls	No	Yes
R^2	0.65	0.67
N	4,963	4,963

*** means statistically significant at the 1% level. The table reports the estimate of the coefficient on the variable Post*Restrictiveness in equation 2 in the main text. Controls include a dummy for race/ethnicity (white non-Hispanic equal to 1) and a dummy for gender (equals 1 if the respondent is male). We report in square brackets the percent effect of a decline in reimbursement of one visit per user on the outcome (please, refer to section 4.3).

Table 3: Elderly receiving care from generation 1: Heterogeneous analysis

	Females	Males	Only one Child	More than one Child	Married	Not Married	All, except White, non-Hisp.	White, non-Hisp.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Post*Restrictiveness	0.0037***	0.0027	0.0043*	0.0031***	0.0028*	0.0026**	0.0063***	0.0020*
	(0.0011)	(0.0017)	(0.0024)	(0.0011)	(0.0015)	(0.0011)	(0.0015)	(0.0012)
	[2.15]	[2.63]	[2.98]	[2.03]	[3.11]	[1.40]	[4.20]	[1.30]
State & Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Linear State Trends	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.67	0.67	0.67	0.67	0.69	0.69	0.67	0.67
N	3344	1619	830	4110	1864	3082	1172	3791

*** means statistically significant at the 1% level. The table reports the coefficient estimate of Post*Restrictiveness in equation 2 in the main text on different subsamples indicated on top of the table. Controls include gender (except in column 1 and 2), and race/ethnicity (white non-Hispanic equal to 1).We report in square brackets the percent effect of a decline in reimbursement of one visit per user on the outcome (please, refer to section 4.3).

Table 4: Intergenerational transmission of caregiving: Generation 1

Receiving care from generation 2, years 2010-2018

	(1)	(2)
Restrictiveness	0.0400***	0.0340***
	(0.0025)	(0.0022)
	[29.63]	[25.10]
Restrictiveness*Caregiver	-0.0024*	-0.0024*
	(0.0013)	(0.0014)
Caregiver	0.0290	0.0300
	(0.0243)	(0.026)
State and Year FE	Yes	Yes
Linear State Trends	No	Yes
R^2	0.57	0.59
N	2,644	2,644

*** means statistically significant at the 1% level, * means statistically significant at the 10% level. The table reports estimates from equation 3 in the main text. We report in square brackets the percent effect of a decline in reimbursement of one visit per user on the outcome (please, refer to section 4.3 for an explanation of this calculation).

Table 5: Intergenerational Transmission of Caregiving: Generation 1

Receiving care from generation 2, years 2010-2018

	Females	Males	Education equal to HS or Less	At least some College	All, except White non-Hispanic	White non-Hispanic	Married	Not Married
	(1)	(2)	(3)	(4)	(5)	(6)		
Restrictiveness	0.0470***	0.0102*	0.0430***	-0.0023	0.0280***	0.0370***	-0.0019	0.0730***
	(0.0020)	(0.0055)	(0.0026)	(0.0025)	(0.0039)	(0.0033)	(0.0031)	(0.0026)
	[29.32]	[12.76]	[29.58]	[2.14]	[16.92]	[30.19]	[2.3]	[41.13]
Restrictiveness *Caregiver	-0.0014	0.0030	-0.0020	-0.0060	-0.0010	-0.0025**	-0.0013	-0.004***
	(0.0015)	(0.0037)	(0.0012)	(0.004)	(0.0034)	(0.00113)	(0.0028)	(0.0015)
Caregiver	0.0420	0.0700	0.0200	0.0990*	-0.0340	0.0390	0.0330	0.0440
	(0.028)	(0.063)	(0.032)	(0.058)	(0.072)	(0.035)	(0.041)	(0.033)
State & Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Linear State Trends	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.69	0.47	0.64	0.55	0.74	0.56	0.42	0.76
N	1,845	799	1,880	764	724	1,920	1,172	1,472

*** means statistically significant at the 1% level, **means statistically significant at the 5% level, *means statistically significant at the 10% level. The Table reports estimates from equation 3 in the main text. Caregiver is a dummy equal to 1 if the respondent during the IPS years (1997-2000) provided care to their parents. We report in square brackets the percent effect of a decline in reimbursement of one visit per user on the outcome (please, refer to section 4.3).

Table 6: Other relevant outcomes for generation 1 and generation 2, 2010-2018

	Bequest	Child live within 10 miles	Money Transfer to children	Has Medicaid Insurance	Has Private-Long Term Care Insurance
	(1)	(2)	(3)	(4)	(5)
Restrictiveness	0.0960***	0.0650***	0.0420***	0.0220***	0.0100***
	(0.0030)	(0.0023)	(0.0023)	(0.0015)	(0.0013)
	[89.44]	[39.53]	[72.91]	[35.20]	[36.36]
Restrictiveness* Caregiver	-0.0050**	-0.0014	0.0007	-0.0005	-0.0007
	(0.0025)	(0.0019)	(0.0023)	(0.0011)	(0.0007)
Caregiver	0.0870***	0.0072	0.0620**	-0.0520***	-0.0082
	(0.0320)	(0.0336)	(0.0250)	(0.0220)	(0.0154)
State and Year FE	Yes	Yes	Yes	Yes	Yes
Linear State Trends	Yes	Yes	Yes	Yes	Yes
R^2	0.506	0.0695	0.313	0.334	0.220
N	1,927	1,861	1,914	2,558	2,558

*** means statistically significant at the 1% level,**means statistically significant at the 5% level, *means statistically significant at the 10% level. The Table reports estimates from equation 3 in the main text. We report in square brackets the percent effect of a decline in reimbursement of one visit per user on the outcome (please, refer to section 4.3).