Improving the Take-Up of Homecare Services Among Holocaust Survivors in a Jewish Charitable Organization

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About This Initiative

This research brief is part of a series by the Social Impact Nudgeathon initiative. This initiative incorporated insights from behavioral economics into the design and delivery of social welfare programs. Developed through a partnership between the Joint Distribution Committee in Israel (JDC-Israel) and the Social Policy Institute (SPI) at Washington University in St. Louis, this initiative is among the first of its kind to launch in Israel.

Working in close collaboration, research teams from the United States and Israel investigated whether using behavioral insights to make small changes in the delivery of social service programs in Israel and Russia would positively influence the outcomes of those programs.

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Key Findings

- This brief summarizes the results from an experiment that tested how behavioral economics principles can increase the use of homecare services among Holocaust survivors in a large Russian city.
- In the study, a random group of homecare clients who wished to refuse eligible homecare services underwent a new enrollment procedure, in which they were first offered the full array of homecare services on a trial basis before confirming their refusal.
- The evidence shows that homecare services increased as a result of this behavioral intervention.
- A substantial increase in the take-up of homecare services was observed for treated individuals who enrolled in the 2-month trial—an increase that extended beyond the 2-month trial period.

Background

Many Holocaust survivors living in the Former Soviet Union (FSU) are eligible to receive more hours of homecare services than what they actually use. Full use of the services for which they are eligible could potentially improve the health status and quality of life of these elderly individuals. To reduce this care gap, we sought to test an experimental intervention designed to increase use of homecare services among Holocaust survivors living in the FSU. This brief highlights the results from this experiment.

Homecare services provide non-professional homecare workers to assist elderly persons with daily living activities such as bathing, dressing, meal preparation, shopping, and cleaning (Sims-Gould & Martin-Matthews, 2010). These services help meet the many physical and emotional needs of elderly individuals. Indeed, research has found the use of homecare services is associated with positive outcomes, including fewer hospitalizations and lower mortality rates (Elkan et al., 2001; Hughes et al., 1997).

Despite the potential benefits of homecare services, multiple barriers can prevent elderly individuals from accessing these services. On the supply side, substantial research has indicated that the delivery of homecare services can be challenging work that is often undervalued and underpaid. Delivery of these services depends on a workforce of non-professional homecare workers. This workforce faces multiple challenges, including irregular work schedules (Fleming & Taylor, 2007; Kaye, Chapman, Newcomer, & Harrington, 2006), low wages, lack of benefits (Kaye et al., 2006), and high risk for work-related injuries (Zeytinoğlu, Denton, Webb, & Lian, 2000). These and other factors contribute to high rates of turnover among homecare workers (Kaye et al., 2006), which in turn, can jeopardize the ability of homecare organizations to provide a sufficient level of quality homecare services.

In addition to workforce barriers, elderly clients' inclination to use homecare services can be affected by several factors, including their age, living arrangements, income, health status and medical needs, and the presence of family support (Døhl, Garåsen, Kalseth, & Magnussen, 2016; Kempen & Suurmeijer, 1991; Litwin, 2004; Murphy, Whelan, & Normand, 2015; Stoddart, Whitley, Harvey, & Sharp, 2002). For example, elderly individuals may have family members who provide some level of care and support, and therefore might be reluctant to accept homecare services. However, this “informal care” may vary greatly in consistency and quality because family members often lack the training and skills needed to meet the extensive and myriad needs of elderly adults. Homecare services can help family members provide competent, safe care for elderly relatives. Receiving the full array of homecare services may be even more important for elderly individuals who live alone and do not have family members to provide support and care.

As elderly populations grow across the world, the demand for homecare services is expected to increase (United Nations, 2017). One segment of the elderly population—Holocaust survivors—may have particularly acute need of high-quality homecare services given the long-term health effects of trauma on
behavioral, mental, and physical health. Currently, just slightly more than an estimated 410,000 Nazi victims are alive today, with approximately 30,000 residing in Russia (Claims Conference, 2018). Many of these survivors are entitled to receive free homecare services delivered by local Jewish social organizations.

This study focuses on a Jewish charitable organization and its subsidiary (hereafter, collectively referred to as the “organization”) that have been operating in a large city in Russia and nearby regions since 1989, providing a wide range of social services for the Jewish community, including food assistance, cultural programs, and homecare services for the elderly. In 2019, the organization provided homecare services for approximately 1,900 elderly individuals and people with disabilities; of these homecare clients, 1,500 are Holocaust survivors.

Recently, the organization received increased funding, enabling it to offer additional homecare services to its clients. However, despite the increased availability of free homecare services, the uptake of these additional benefits has been considerably lower than expected. Moreover, many of the organization’s homecare clients were already claiming fewer homecare hours than the amount to which they were entitled. To improve uptake of homecare services among its clients, the organization aimed to explore whether incorporating principles from behavioral economics into the enrollment procedures for its homecare services would increase use of these services among Holocaust survivors.

**Research Purpose**

This study addresses the fact that many of the organization’s homecare service clients were forgoing at least a portion of their total allotted hours of homecare services. This study seeks to explore whether applying principles of behavioral economics to redesign organizational protocols when a client refused the full amount of service hours could narrow the gap between the maximum number of homecare service hours offered to clients and the actual number of hours in which clients enrolled.

Notably, to our knowledge, this study is the first experimental study to use behavioral principles to address the issue of homecare services uptake among elderly clients. Additionally, this study is the first to use a behavioral economics intervention targeting the behaviors and outcomes of Holocaust survivors, who are a highly vulnerable population that may stand to disproportionately benefit from increased access to social services.

**Experimental Design and Study Procedures**

The organization worked with researchers to implement a randomized controlled trial of a behavioral intervention that changed the protocols associated with

![Figure 1: Standard Service Waiver Form (Control Group)](image)

Statement

I refused ____ homecare hours per week (out of ____ hours). I request to get ________ homecare hours per week because ________________________________

______________________________.

Date ______________________

Signature ____________________

*Note: This is the service waiver form shown to homecare service clients in the control group who elected to enroll in fewer than the maximum number of service hours to which they were entitled.*
refusing homecare services. The standard procedure of homecare services enrollment requires clients to designate the services they want and to sign a “service refusal form” that specifies the number of service hours the client is refusing. To increase clients’ use of services, the standard service waiver procedure was modified using the principles of behavioral economics.

Using random assignment, a sample of homecare clients who were not claiming the maximum number of service hours to which they were entitled was assigned to either the control group or the treatment group. The organization’s standard enrollment and service refusal procedures were used with study participants in the control group. Specifically, elderly individuals who chose to refuse part or all of their homecare service hours received the standard service waiver form, which they signed in acknowledgment that they were refusing services to which they were entitled. The standard service waiver form is depicted in Figure 1.

Study participants in the treatment group who refused any homecare service hours went through an updated refusal process that included two steps, as illustrated in Figure 2. First, the participants were offered the option of receiving all services for which they were eligible for a 2-month trial period (see Figure 2, Panel A). Participants were assured that they could change the number of service hours at any time during or after the trial by notifying the agency. If participants still wanted to refuse some of their service hours, they had to actively opt out from the trial. Those who opted out from the trial could refuse homecare hours by using the standard service waiver procedure (see Figure 2, Panel B, page 6).

The revision and design of the service waiver form used with the treatment group was informed by work from the field of behavioral economics. In particular, the service enrollment process was changed so that clients would enroll in the maximum number of service hours for which they were eligible; if clients did not want all services, they had to opt-out of those services. In the control group (service as usual), the default behavior was for clients to select the number of hours of homecare services they wanted to receive each week. The default behavior for the treatment group was to try the full service benefits for 2 months, at which point participants could decide if they wanted to change their number of service hours. This new structure thus required that clients “opt-out” of receiving their full number of service hours.

**Figure 2: Updated Service Waiver Form (Treatment Group)**
**Panel A: Two-Month Service Trial**

**Statement**

In order to ensure that I have enough weekly homecare hours to meet my needs, I would like to try out all homecare hours I am entitled to (____ hours per week) for two months. After two months, I will notify you if I no longer want to receive these hours. I can change the number of hours at any time if I would like to.

- Yes, I would like to receive a two-month trial of all services I am entitled to.
- No, I would not like to receive a two-month trial, and I would like to refuse some services I am entitled to.

Date ______________________
Signature ____________________
Research has shown that when presented with an opt-out decision structure, individuals are more likely to rely on the default choice and automatic program enrollment (e.g., Madrian & Shea, 2001). Moreover, the preference for status quo combined with the additional minor effort required to reduce service hours as well as unwillingness to give up benefits they already have may prevent homecare clients from canceling their receipt of maximum service hours after a 2-month trial (Madrian & Shea, 2001; Samuelson & Zeckhauser, 1988). Therefore, we hypothesized that when presented with an opportunity for a 2-month trial, rather than immediately refusing some services, study participants would follow the default and accept a trial period of all homecare services for which they were eligible. Subsequently, after experiencing the full array of homecare services during the 2-month trial, participants would be less likely to refuse service hours.

The study was conducted in a large city in Russia and in regions surrounding the city. The experiment targeted homecare clients of low functional capacity who have refused at least 5 hours a week of the homecare services for which they were eligible. This group of the organization’s clients was selected as the study’s target population because they were perceived as the most likely to benefit from using additional hours of homecare services. The study sample consisted of 298 homecare clients (n = 149 in the control group, n = 149 in the treatment group), all of whom were Holocaust survivors.

The intervention was administered by the organization’s homecare “curators,” who perform regular service quality evaluations for homecare clients. The interventions were undertaken by the organization as part of its internal organizational procedures. The evaluations were conducted during regular home visits scheduled each month for clients with low functional capacity and every 3 months for clients with higher functional capacity. During the quality evaluation visits, homecare curators offered study participants an opportunity to increase their number of homecare service hours to the maximum level of eligible hours. If the participant refused to increase their service hours, the curator documented study participant’s decision in a service waiver form that documents a client’s refusal of service hours.

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Data and Research Method

To evaluate the impact of the behavioral intervention, we used data from two sources. First, curators administering the intervention documented their
interactions with study participants, noting the visit date and whether the participant requested to refuse services. In addition, for the treatment group, the curators documented whether the participant accepted the offer of the 2-month trial of their maximum homecare service hours. The data from curator reports were merged with administrative data showing the number of service hours each study participant received each week versus the maximum number of weekly service hours that the study participant was eligible to receive.

To assess the impact of the behavioral intervention on the homecare service hours delivered to study participants, we used a three-level multilevel model to test the effect of changing the service refusal forms and procedures.

This approach enabled us to make a direct comparison of differences between treatment and control groups over the full study period, while accounting for the fact that multiple clients were exposed to the same curators (and thus their observations may be correlated) and that the repeated observations across time within each client are interdependent. The key outcomes of interest included (a) whether study participants had a gap between their maximum service hours they were eligible to receive (hereafter, eligible hours) and the actual number of service hours received (hereafter, received hours), and (b) the size of the gap between eligible and received hours. Regression models controlled for baseline demographic (e.g., age) and health (e.g., functional capacity) characteristics. Following study enrollment, participant outcomes were tracked for 15 weeks.

**Study Sample**

Of the 298 homecare clients included in this study, 149 were randomly assigned to the treatment group and 149 were randomly assigned to the control group. The vast majority of the treatment group (93%; n=139) initially refused their maximum eligible service hours, and of these, 23% (n=32) agreed to accept the 2-month trial of maximum eligible homecare service hours.

Baseline summary statistics for the study sample are presented in Table 1. The two groups appeared statistically identical, indicating that randomization worked as expected. The vast majority of clients lived in the large city rather than outlying regions; specifically, 91% of the control group and 87% of treatment group participants were residents of the large city. Both groups had a majority of women participants (75% in the control group and 79% in the treatment group), and both groups had an average participant age of almost 86 years.

Slightly more than one-third of participants in the control group and slightly more than a quarter of the

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**Table 1: Summary of Study Sample Characteristics at Baseline**

<table>
<thead>
<tr>
<th></th>
<th>Control group</th>
<th>Treatment group</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident of the large city</td>
<td>91%</td>
<td>87%</td>
<td>4%</td>
</tr>
<tr>
<td>Female</td>
<td>75%</td>
<td>79%</td>
<td>-4%</td>
</tr>
<tr>
<td>Age (years)</td>
<td>85.8</td>
<td>85.9</td>
<td>-0.1</td>
</tr>
<tr>
<td>Single (no spouse/no relatives nearby)</td>
<td>37%</td>
<td>28%</td>
<td>9%*</td>
</tr>
<tr>
<td>Program eligibility (hours per week)</td>
<td>31.7</td>
<td>33.2</td>
<td>-1.5</td>
</tr>
<tr>
<td>Current plan (hours per week)</td>
<td>17.2</td>
<td>18.4</td>
<td>-1.2</td>
</tr>
<tr>
<td>Program gap (hours per week)</td>
<td>14.5</td>
<td>14.9</td>
<td>-0.4</td>
</tr>
<tr>
<td>Observations</td>
<td>149</td>
<td>149</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Summary statistics measured in December 2018. Statistical significance: * p < 0.1
treatment group clients reported living alone and did not have relatives living nearby, which was a marginally significant statistical difference.

In terms of program participation, on average, control group participants were eligible to receive 31.7 hours of the organization’s homecare services each week but, on average, had enrolled in only 17.2 hours, yielding a weekly gap at baseline of 14.5 hours between eligible and received hours. On average, treatment group participants were eligible for 33.2 hours of the organization’s homecare services each week but had enrolled in only 18.4 hours, resulting in a weekly gap of 14.9 hours between eligible and received hours. The baseline differences in service hour eligibility and enrollment were not significantly different between the two groups.

**Results**

Figures 3 and 4 illustrate the comparison of control and treatment groups on the incidence and size of the gap between eligible and received service hours over 15 weeks following a curator’s home visit. We present the average treatment effects for the entire sample regardless of whether clients refused services during the home visit. Baseline for both groups was Week 0, corresponding to the initial home visit during which curators made the offer of additional service hours.

In Figure 3, we find a decrease in the proportion of treatment group participants with any gap in homecare hours by Week 3. Over time, as compared with the control group, the treatment group consistently had a higher percentage of participants with no gap in service hours (i.e., receiving their maximum eligible hours). The larger between-group differences observed between Week 3 and Week 8 were for the most part statistically significant. The smaller between-group differences observed in later weeks of the study were statistically insignificant at the conventional level, possibly due to low statistical power.

Overall, between-group differences were not evident until Week 3 (i.e., the third week after the implementation of the intervention). One explanation for this lag in intervention effect might reflect staffing challenges. The organization may have been unable to adjust its staff of homecare workers when study participants in the treatment group agreed to additional service hours and may have needed time to hire and/or adjust employees’ work schedules in order to provide the additional hours of homecare services. It is also worth noting that the proportion of treated clients with no gap in hours (i.e., receiving their maximum eligible hours) remained relatively stable after Week 3, suggesting that study participants who enrolled in the 2-month trial...
did not opt-out of services after the trial period and continued using the additional services.

Finally, although the proportion of control participants with any gap in homecare services remained relatively constant during the first weeks of the study, we observe a decrease beginning at Week 8.

The factors driving this dynamic are unclear, though the decreased gap between eligible and received hours might be due to control participants’ declining health that, in turn, could lead to an increased willingness to use additional homecare hours. In addition, feedback from curators suggests that a mere experience of home visits could have had an indirect effect on individuals in the control group. Clients in the control group may have been reminded that they are forgoing some of their homecare hours, which encouraged them to take up additional services.

Figure 4 illustrates the comparison of the average number of gap hours between the control and treatment groups. We find a greater gap in homecare service hours (i.e., eligible vs received hours) in the control group than in the treatment group. Though this finding is consistent with the results shown in Figure 3, the differences were not statistically significant, likely due to the lack of statistical power.

Last, we explored the gap in eligible and received hours among the 32 treatment participants who initially refused additional services but then agreed to enroll in the 2-month trial of maximum eligible services. As shown in Figure 5, the average number of gap hours fell sharply following the curator’s home visit and stayed low—slightly less or slightly more than one hour per week—starting at Week 3 (i.e., 3 weeks after intervention offer of additional service hours).

Notably, the average gap was never equal to zero, which could be due to the unavailability of curators during some weeks, a client’s request to reduce homecare during a particular week, or data entry errors. At the same time, the observed trend in the average gap hours was consistent with our observations reported in Figure 3; that is, clients who agreed to participate in the full-services trial period did not opt-out of receiving their maximum eligible hours at end of the trial period. This finding is also consistent with anecdotal evidence from homecare curators who observed that clients did not drop the additional hours after their trial period.

Conclusion and Implications

This study tested the effectiveness of an extremely low-touch intervention that offered Holocaust survivors a 2-month trial of their maximum homecare service hours before they made a final decision to refuse some of those hours. Our findings demonstrate that providing homecare clients with an opportunity to enroll in a 2-month trial led to a reduction in the gap between eligible and received hours of homecare, and the reduced gap in eligible versus received hours persisted in the treatment group after the end of the trial period.

The study findings have important implications for recipients of homecare services and homecare agencies. In addition, study findings can inform the provision of other services to Holocaust survivors as well as services to elderly populations more generally. The study’s key implication is that the intervention appears to be effective in closing the gap between the number of service hours for which clients are eligible.
and the number of service hours that clients actually receive. The study findings suggest that the homecare organization could benefit from implementing the new service enrollment procedure (i.e., offering a full-services trial period with an opportunity of service opt-out at the end of the trial) as its standard practice.

If the redesigned service waiver form is adopted on a wide scale, further testing might be useful to reveal whether additional changes such as alternative framing of a trial period, alternative presentation of the opt-in/opt-out option, or changes in verbal scripts have the potential to further increase uptake of homecare services. Moreover, the agency might consider testing whether the same or a slightly upgraded intervention would remain effective in other locations and among other client populations (e.g., non-Holocaust survivors).

This study’s conclusions may be useful to other homecare agencies or similar organizations. While organizations may choose to pursue different strategies to increase program uptake (e.g., integrated care services), the behavioral approach provides a feasible and effective alternative. Behaviorally informed interventions offer a substantial advantage in that these low-touch, low-cost solutions can be easily applied to optimize existing programs and procedures. For example, organizations may choose to make minor revisions to their online enrollment forms such as changing default selections at the time of enrollment, thereby nudging their clients toward more desirable behaviors without making substantial changes to program structures.

More broadly, this study demonstrates how experimental evidence can inform the activities of social service organizations. Because cost and time constraints often prevent social service organizations from engaging in rigorous research before implementing programs and changing procedures, agencies are often forced to make changes to their programs without incorporating empirical evidence into their decision making.

The study is one example of how rigorous evidence can help practitioners learn what program changes may or may not be successful before implementing them on a wider scale.

While this study provides unique contributions to both research and practice, future research should aim to explore whether the reduced gap in received homecare hours that occurred through this intervention resulted in improved long-term outcomes, such as higher quality of homecare services and, ultimately, improved health and quality of life of elderly program beneficiaries.

Endnotes

1. The design of the treatment condition was informed by anecdotal evidence from another organization that provides homecare services in the FSU region. Staff of that organization observed that once homecare clients agreed to additional homecare hours, they were unwilling to give them up.

2. The organization uses a client’s functional capacity—a term that refers to a person’s ability to manage essential life activities—to determine the number of homecare service hours for which a client is eligible. Clients with a higher functional capacity rating (which the organization scores as 5 and 6) are allotted a maximum of 25 homecare service hours per week, whereas clients with the lowest functional capacity (a score of 13) are allotted a maximum of 168 service hours per week (which translates to 24/7 care).

3. Prior to study implementation, the curators received training on maintaining study fidelity. As part of this training, curators were given a suggested verbal script to guide their communication with study participants.
References


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Disclaimer

This research brief reflects research work conducted by the authors, and does not necessarily represent the views or opinions of the JDC-Israel, the Government of Israel, the JDC-FSU, or the participating Jewish charitable organization. The authors accept full responsibility for errors or omissions.

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