

The Stronger Nudge

Evaluation Report

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**Money &
Pensions
Service**



THE
**BEHAVIOURAL
INSIGHTS
TEAM**

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1. Executive summary

1.1 Overview of the project

The Behavioural Insights Team (BIT) was commissioned by the Money and Pensions Service (MaPS) to evaluate the impact of the 'Stronger Nudge' interventions on the number of people who receive Pension Wise guidance before they access their pension savings. The key components of the Stronger Nudge were to explain the nature and purpose of the Pension Wise guidance, increase the prominence of the guidance during the call by offering it as a normal part of the pension access journey, and to make it easy for pension savers to book a Pension Wise appointment.

The interventions were delivered by call handlers at three pension providers: Aviva, Hargreaves Lansdown and Legal General. When pension savers called to access their pension or to enquire about their pension options, call handlers used a pre-defined script incorporating wording to nudge people to take an appointment. Then two different interventions were tested; one group was offered to have the call handler book the customer a Pension Wise guidance appointment, the other was offered a warm transfer to Pension Wise who would book an appointment for them. Once the pension saver was transferred to Pension Wise, call handlers delivered a similar pitch which aimed to nudge the caller to book an appointment. These interventions were tested against the business as usual signposting process which typically involved signposting pension savers to the Pension Wise website or appointment booking line.

1.2 Evaluation approach

The impact of the interventions on the uptake of Pension Wise guidance was tested using a Randomised Controlled Trial. This was complemented with a qualitative Implementation and Process Evaluation (IPE) to explore how the interventions were delivered in practice and examine delivery staff and pension holder experiences of the intervention. Those pension savers reporting that they have had guidance or advice in the previous 12 months - representing 27% of the total¹ - were excluded from the analysis as the intervention aimed to nudge those pension savers who had not received guidance before. The trial was conducted between October 2019 and February 2020.

1.3 Key findings

Both interventions were successful in encouraging pension savers to book and attend a Pension Wise appointment. Of those pension savers who did not report

¹ The proportion of pension savers receiving guidance may be different to this figure because many opt to receive guidance online rather than through the phone, and some did not remember or were not asked whether they received guidance.

having had guidance or advice in the previous year, approximately 11% received Pension Wise guidance as a result of the interventions in comparison to approximately 3% in the Control group. There was no evidence of a significant difference between the two interventions.

In follow-up interviews with a number of trial participants, we found that pensions savers indicated several factors influenced their decision to take an appointment. The most frequently given reason to decline the offer of a Pension Wise appointment was that the pension holder felt they already had sufficient pension knowledge. Those who reported they had moderate levels of pension knowledge were most likely to accept a Pension Wise appointment, while those reporting the most and least knowledge were less likely to agree to an appointment. Pension savers who were looking to explore their options with a little pension knowledge but no predefined plan responded most positively to the offer of a Pension Wise appointment.

Provider delivery staff reported that both the online booking and warm transfer interventions were convenient and easy to manage. Unsurprisingly, the warm transfer process was considered more time-efficient for staff.

The implementation of the interventions did vary across pension providers due to some adaptation to the training programme and delivery plans. Staff training varied from a 5-minute briefing to a full day intensive training session, involving both individual and group training. Staff felt that they needed to adapt the script to their own style, as they would have preferred it to be less formulaic. This did not impact on the delivery of the intervention.

1.4 Conclusion

The interventions were successful at increasing the number of pension savers receiving Pension Wise guidance, providing further evidence of the significant impact that nudges can have on behaviour. The impact of the ‘Stronger Nudge’ was significantly higher than most other policy interventions that use nudges,² which suggests that the environment was particularly appropriate for such an intervention.

The research also shed more light on why pension savers decide not to take guidance. Many felt that they had already made their decision and didn’t need further help, or already knew enough having previously had guidance or advice, or had undertaken their own research. On balance the intervention was successfully implemented, despite some initial implementation issues with delivery of the script.

² See Della Vigna, S., Linos, E. (2020). RCTs to Scale: Comprehensive Evidence from Two Nudge Units. Working Paper, UC Berkeley and further discussion in this report

2. Overview of the project

The Behavioural Insights Team (BIT) was commissioned by the Money and Pensions Service (MaPS) to evaluate the impact of two behavioural interventions aimed at increasing the number of people who take pension guidance before they access their savings. This section explains the broader context behind this policy initiative as well as the interventions that were evaluated.

2.1 Project context

The Pension Freedoms reforms

In his 2014 budget, the Chancellor of the Exchequer announced the Pension Freedom reforms, which sought to give people more control over how they access their defined contribution pensions.³ To accompany this policy change, the Chancellor announced a ‘guidance guarantee,’ providing everyone with the option of having guidance from the age of 50 to help them understand the new options available and make more informed decisions. Pension Wise was created to deliver this guidance in the form of face-to-face and telephone appointments. During the appointment, guidance specialists explain what pension savers can do with their pension pots, describe how to shop around, and what to look out for with regards to taxes, fees and scams. The free and impartial nature of service enables consumers to make more informed financial decisions. The most recent Pension Wise Service Evaluation (2018/19) found high levels of satisfaction with the service, with over 9 in 10 customers reporting being happy with the overall Pension Wise guidance experience.⁴

The Financial Guidance and Claims Act 2018

On 10 May 2018, the Financial Guidance and Claims Act 2018 (the Act) received Royal Assent. The Act provided the legal basis for establishing MaPS, which brought together the services previously provided by the Money Advice Service, The Pensions Advisory Service and Pension Wise into one organisation. During the passage of the Act through Parliament, members of both Houses expressed the view that Pension Wise guidance was highly beneficial, but that not enough people were receiving the guidance before accessing their pension savings. Sections 18 and 19 of the Act set out a requirement for pension schemes to refer customers to appropriate pension guidance and provide them with an explanation of the nature and purpose of such guidance. Pension savers may choose to opt out of that guidance. Parliament acknowledged that there was a need to encourage people to seek guidance in a way that engaged them and wasn’t seen as a box-ticking

³ For an explanation of this and other pensions-related terms, please see <https://www.moneyadviceservice.org.uk/en/articles/pensions-and-retirement-jargon-buster>

⁴ <https://moneyandpensionsservice.org.uk/wp-content/uploads/2020/01/Pension-Wise-service-evaluation-2018-2019-Experiences-and-outcomes-of-customers-Ipsos-Mori.pdf>

exercise. During the passage of the Act through parliament, Ministers committed to testing different approaches to see what works best, to inform the regulation-making process.

The Stronger Nudge interventions

Small changes in policy and practice can yield significant impacts on people's behaviour. In their book 'Nudge: Improving decisions about health, wealth, and happiness',⁵ Richard Thaler and Cass Sunstein state that nudges are "choice architecture that alters people's behaviour in a predictable way without forbidding any options or significantly changing their economic incentives." They showed that small details that made a task more challenging could be the difference between a choice to do something or a decision to put it off – sometimes indefinitely.⁶

These small changes or nudges are increasingly taken up by policymakers as an effective tool to change behaviour as they can have significant impact at a low cost. A recent review of 126 large scale trials from two of the largest Nudge Units in the US found that nudges on average increased binary outcomes by 1.4 percentage points from a baseline of 17.4%. Another study of a separate sample of nudge trials published in academic journals found that the average impact of those nudges was much larger – an 8.7 percentage point increase, from a baseline of 26%.⁷

BIT applied these principles when running a previous series of trials with Pension Wise to encourage people approaching retirement to seek pension guidance. The interventions involved the design of a 'Pensions Passport' which consolidated essential information from the usual 50–100-page pack issued by the industry onto one side of A4 paper. That research concluded that those receiving the new single-page Pension Passport were ten times more likely to visit the Pension Wise website compared to those receiving the usual wake-up pack.⁸ This work informed recent rules introduced by the FCA (with effect from 1 November 2019) requiring a single page summary to be sent with all wake-up packs.

The Behavioural Insights Team published work in 2014 noting that four simple principles in designing behavioural interventions were more likely to make people change their behaviour - make the behaviour Easy, Attractive, Social and Timely (EAST). The Stronger Nudge interventions aimed to apply each of the EAST principles by simplifying the process of obtaining guidance, presenting the offer of guidance as a normal part of the customer journey, emphasising the benefits of the

⁵ Richard H. Thaler, Cass R. Sunstein, (2008) *Nudge: Improving decisions about health, wealth, and happiness*, Yale University Press,

⁶ Behavioural Insights Team. (2014) . EAST Four simple ways to apply behavioural insights. <https://www.bi.team/publications/east-four-simple-ways-to-apply-behavioural-insights/>

⁷ Della Vigna, S., Linos, E. 2020). RCTs to Scale: Comprehensive Evidence from Two Nudge Units. Working Paper, UC Berkeley.

⁸ <https://www.bi.team/wp-content/uploads/2017/10/Pension-wise-trials.pdf>

guidance, noting the positive experience others had had with the Pension Wise service, and making the booking as soon as possible. The interventions drew on research on the impact on behaviour of social norms,⁹ loss aversion,¹⁰ endowment effects¹¹ and reciprocity.¹² The full pitch is described in more detail in Appendix 1.

⁹ Social norms involve demonstrating that most people perform the desired behaviour. Describing what most people do in a particular situation encourages others to do the same.

¹⁰ Loss aversion describes people's preference to avoid losing something they already have rather than gaining something new of equivalent value. It was first proposed by Daniel Kahneman and Amos Tversky in "Prospect Theory: An Analysis of Decision under Risk", *Econometrica* Vol. 47, No. 2 March 1979 , 263-292.

¹¹ The endowment effect reflects people's tendency to overvalue that which they already own, even when its actual value is much lower. See Kahneman, D., Knetsch, J. L., Thaler, R. H. (1991). *Anomalies: The endowment effect, loss aversion, and status quo bias*. *Journal of Economic Perspectives*, 5(1), 193-206.

¹² Reciprocity refers to a social norm in which people expect to respond to a non-monetary action with an action of similar value. Returning a favour is an example of reciprocity, as are charities including small gifts in letters requesting donations. See Fehr, E., Gächter, S. (2000). *Fairness and retaliation: The economics of reciprocity*. *Journal of Economic Perspectives*, 14, 159-181.

3. Evaluation approach

3.1 Project aims

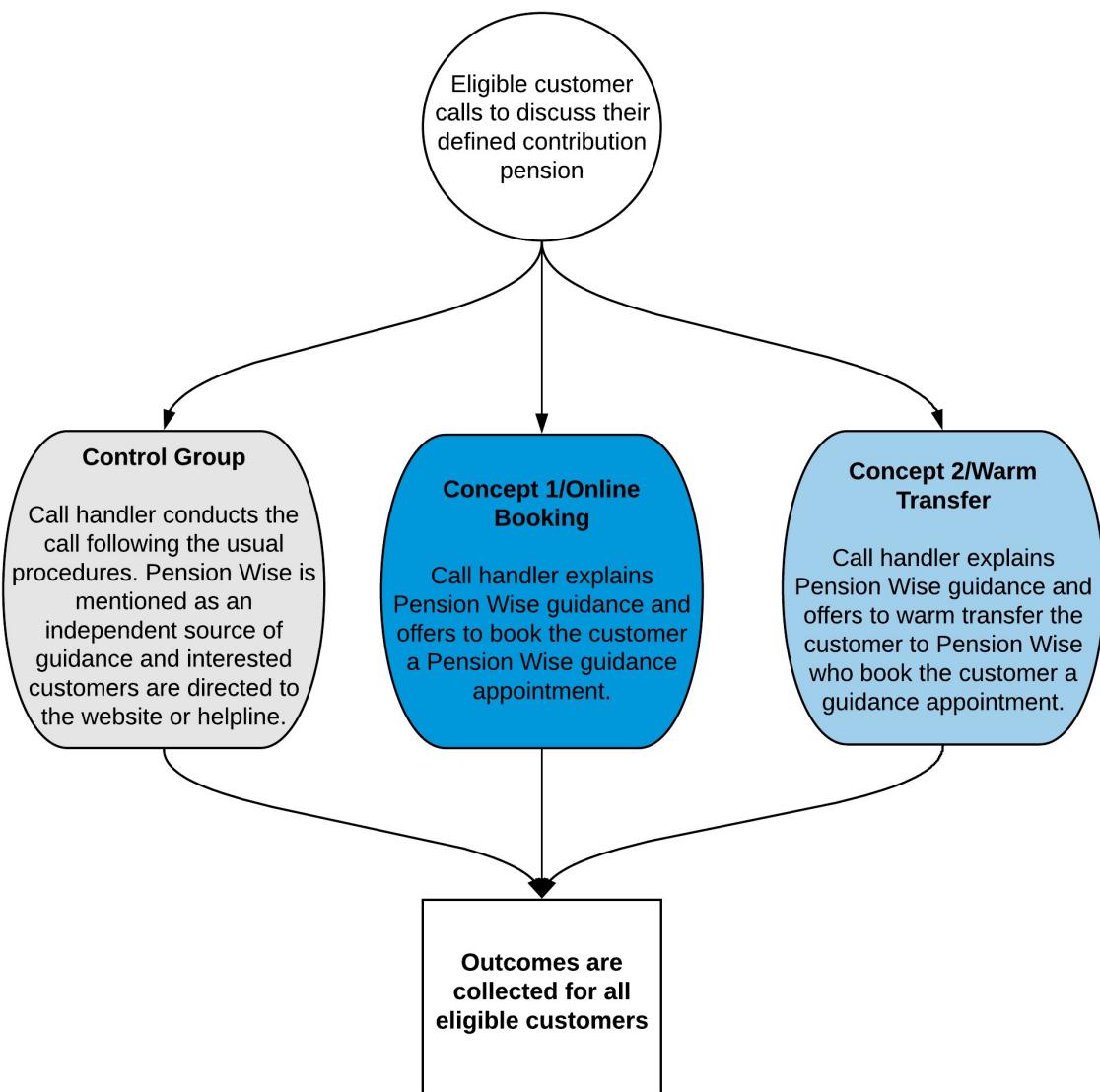
The primary objective of the evaluation was to test whether more people receive Pension Wise guidance as a result of the Stronger Nudge interventions. The impact was evaluated using a Randomised Controlled Trial (RCT) which was delivered through the three pension providers: Aviva, Hargreaves Lansdown, and Legal General. The impact evaluation, which looked at the number of people booking appointments, was complemented with an implementation and process evaluation that sought to provide a deeper explanation of the findings from the trial gathered from those who had taken part. The research included interviews with pension savers and focus groups with call agents who delivered the interventions.

3.2 Impact evaluation methodology

The methodology used to evaluate the impact of the interventions was an RCT in which changes observed in the two intervention groups were compared against a Control group that did not receive the intervention. Call handlers at each of the pension providers were randomly allocated to either deliver the Treatment 1/Online Booking intervention, the Treatment 2/Warm Transfer intervention or to be in the Control group. When pension savers called the providers to access their pension, they were then randomly assigned to a call handler from each of the three groups.

Figure 1 below outlines the basic structure of the trial.

Figure 1: Overview of the random assignment and data collection process



3.3 The Sample

The trial was conducted over the course of 19 weeks between October 2019 and February 2020. The trial participants consisted of defined contribution pension savers who called one of the participating pension providers within the trial period in order to access or ask about access to their pension pot(s).

Only the pension savers who met all the following criteria were included in the sample:

- be an existing customer of the participating provider;
- call in relation to an application to start accessing their pension, or to enquire about their access options;

- be over the age of 50 which is the minimum age at which one can access Pension Wise guidance);
- not proactively disclose being in serious ill health or in a crisis;
- not declare having had Pension Wise guidance or regulated advice in the past 12 months.

This last criterion was set as those who had recently received pension advice or guidance were likely to have a better understanding of their pension options. As the trial was designed to increase the number of people who would not otherwise have taken advice or guidance, those who declared having had guidance were excluded.

The trial found that 27% of participants explicitly declared receiving pension advice or guidance in the past 12 months and as a result these pension savers were excluded from the analysis. The analysis includes the 38% of pension savers who indicated that they had not received advice or guidance and the remaining 35% who either didn't remember or weren't asked.¹³

After removing these customers and others who didn't meet the remaining eligibility criteria, the sample size was 4,135 pension savers. All subsequent analysis, unless stated otherwise, was conducted on this sample.

The pension savers in the trial sample were not evenly distributed across Treatment groups, with 44% of them going through the Control group, and 28% and 27% going through Treatment 1/Online Booking and Treatment 2/warm transfer respectively.

The mean age of pension savers in the trial sample is 62 years old, while the mean pot size is £94,945 and the median pot size £21,000. This large difference indicates that a small number of pension savers have much larger pot sizes than the majority of the pension savers (see Appendix 3; Table 7 for a breakdown of the characteristics and more information about the sample).

3.4 Outcomes

The impact evaluation measured the following two outcomes:

- whether the pension holder booked a Pension Wise guidance appointment to take place within six weeks of entering the trial; and
- whether the pension holder attended a Pension Wise guidance appointment within six weeks of entering the trial.

The six-week measurement period ensured that all participants in the trial had the same amount of time to book and attend an appointment. The precise duration was

¹³ It is not possible to know for certain why customers weren't asked. The call handlers were instructed to do this but may have forgotten or not been able to do so, or may have mis-recorded responses

chosen following advice from MaPS, to give enough time for people to book appointments after the intervention.

The evaluation examined both bookings and attendance to assess whether the intervention was not simply nudging callers to book an appointment but also actually to attend. As the interventions were delivered over the phone, BIT was concerned that pension savers would accept the appointment offer out of politeness and later cancel or simply not attend. This could result in the interventions having a positive and significant impact on bookings but not actually being effective at increasing the number of guidance appointments.

In addition to the two primary outcomes, the reasons for declining the offer of appointment were examined. These were collected by call handlers from a menu of options. Call handlers also had the ability to expand on a reason in a free text column of a data collection spreadsheet if the reason given did not align well with the provided options.

3.5 Implementation and process evaluation

The Implementation and Process Evaluation (IPE) was conducted between February and March 2020 to provide context for the impact evaluation and to identify improvements to future iterations of the study. The IPE consisted of 18 pension holder interviews and 5 focus groups with staff from the pension providers who had participated in the trial.

Interviews with pension savers

The qualitative interviews with pension savers addressed the following research objectives, which were aligned with the broader research questions of the trial:

- map the range of participant attitudes and perceptions of pensions and pension support;
- describe participants' experiences of the initial conversation with the provider;
- describe participants' decision-making pathways;
- identify key influences on participants' decision making; and
- identify suggestions for improvement in initial support given by the provider for accessing guidance.

The IPE employed a purposive sampling strategy to select the individuals that would be approached for an interview. Purposive sampling strategies select participants based on key characteristics. The strategy ensures that a comprehensive exploration of the relevant themes is achieved by interviewing a wide range and diversity of callers.¹⁴ Across the 18 participants interviewed, a balanced spread of pension savers with the following characteristics were sampled:¹⁵

¹⁴ Details on recruitment can be found in Appendix 2

¹⁵ See Appendix 2 for a sampling table

- opt in or out of Pension Wise appointment;
- age;
- gender;
- employment status;
- pension pot size.

Provider focus groups

The focus groups with call handlers addressed the following research objectives:

- describe staff training experiences and resourcing requirements
- describe staff workload burden/efficiencies;
- describe fidelity to the intervention and conversational strategies which enhance uptake of the intervention;
- describe perceived effectiveness of intervention by staff;
- highlight suggestions for improvement to training and delivery.

A convenience sampling strategy was used where delivery staff were recruited through pensions providers who were asked to nominate five to six delivery staff across the three Treatment groups.¹⁶

¹⁶ See Appendix 2 for a sampling table for the focus groups

4. Findings

4.1 Impact evaluation

Both interventions were successful at increasing the number of pension savers receiving Pension Wise guidance compared to business as usual. Amongst those pension savers who reported not having had guidance or advice before, the proportion who attended a Pension Wise appointment increased almost fourfold. There was no evidence of a difference between the two interventions.

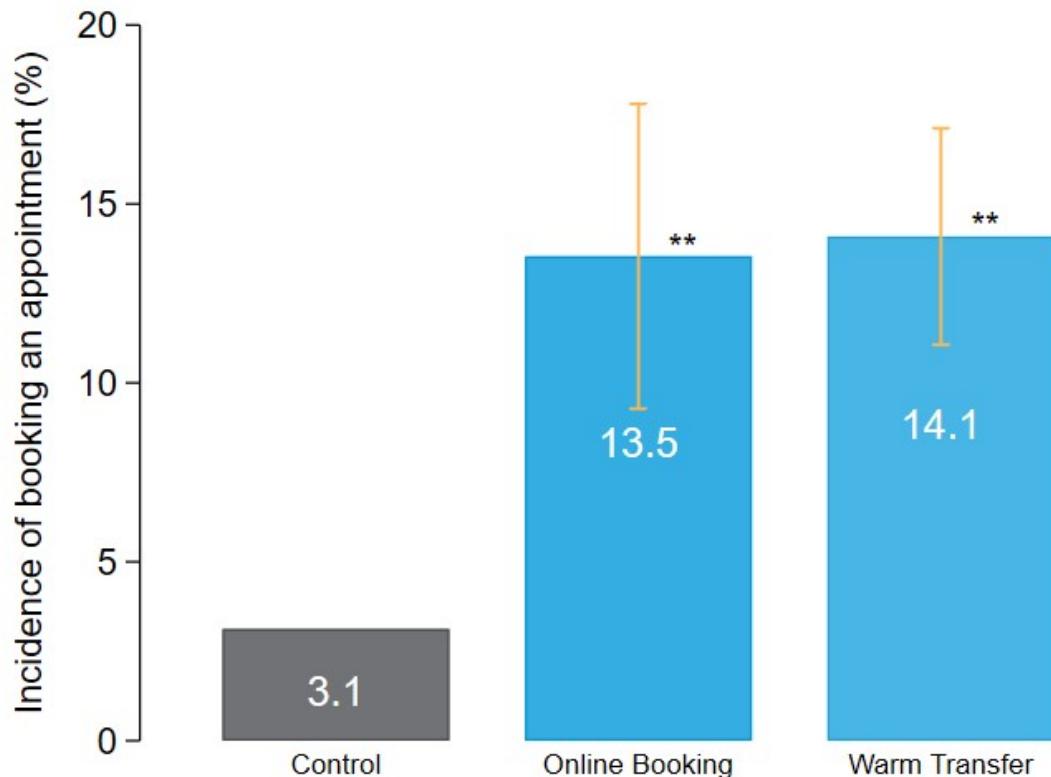
This section reports more detailed findings while technical specifications can be found in Appendix 3. As discussed in the previous section, those pension savers reporting that they have had guidance or advice in the previous 12 months - 27% of the total - were excluded from the analysis as the intervention aimed to nudge those pension savers who had not received guidance before.

All the reported results will therefore refer to the group of pension savers who did not report having had guidance or advice in the past.

[Impact on pension savers booking a Pension Wise appointment](#)

The interventions had similar success in increasing the incidence of a caller booking a Pension Wise appointment within six weeks of calling their pension provider. In the case of the online booking, 13.5% of callers booked an appointment, which was 10 percentage points more than the Control group, where the proportion was 3.1% (Figure 2). Similarly, 14.1% of callers in the Treatment 2/warm transfer group booked an appointment, which was 11 percentage points more than the Control group (Figure 2). When compared to each other, there was no statistical difference between the online and warm transfer booking interventions.

Figure 2: Incidence of booking a Pension Wise appointment within six weeks



**p<0.01, *p<0.05, +p<0.1

N = 4,109

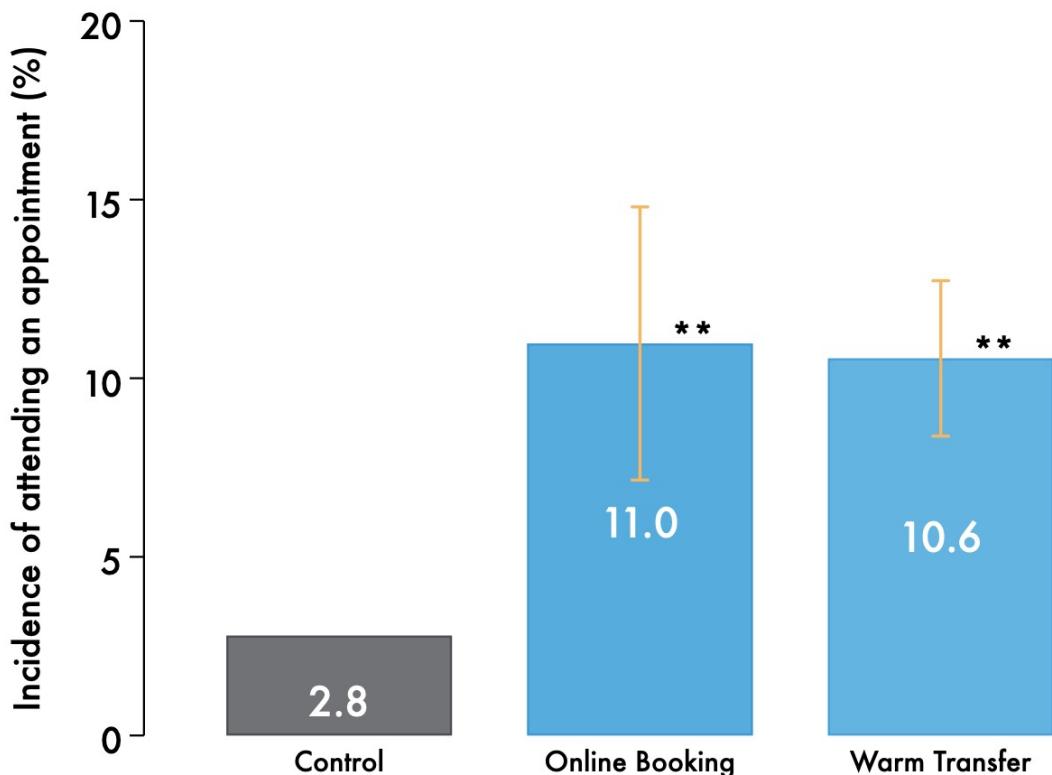
Primary analysis

Explanatory note: The bars represent the Treatment groups; the vertical axis measures the outcome of interest for each of those groups; the orange line represents 95% confidence intervals - values of the Control group outside those intervals means causal evidence that the intervention has had an impact on the outcome; N denotes the number of participants involved in the analysis that is visualised in the graph.

Impact on pension savers attending a Pension Wise appointment

As in the case of booking an appointment, both interventions were similarly effective at increasing the number of pension savers receiving Pension Wise guidance compared to business as usual. In both intervention groups around 11% of pension savers attended a Pension Wise appointment, which was 8 percentage points more than in the Control group (Figure 3). There was no statistically significant difference between the interventions.

Figure 3: Incidence of attending a Pension Wise appointment within six weeks



** $p<0.01$, * $p<0.05$, + $p<0.1$

N = 4,069

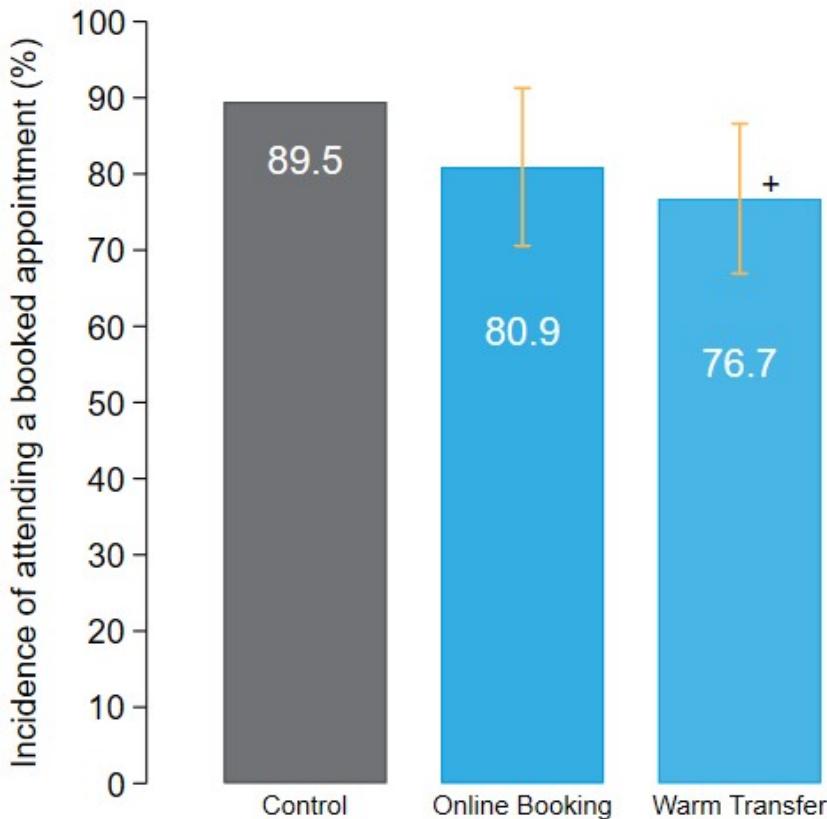
Primary analysis

Appointment attendance¹⁷

Amongst those who booked appointments, pension savers allocated to the Treatment 2/Warm Transfer intervention were found to be less likely to attend their appointment. Of those pension savers who were allocated to the Control group and booked an appointment (i.e. the 3.1% of the original sample), 89.5% of booked appointments were attended, in contrast to 76.7% of appointments booked in the Treatment 2/Warm Transfer group (Figure 4). The observed difference between attendance rate in the Control group and Treatment 2/Warm Transfer group is weakly significant. The attendance rate in the Treatment 1/Online Booking group was 80.9%, however the difference with the Control group was not statistically significant.

¹⁷ We suspect that the pension savers who booked appointments in the Treatment groups are not comparable to the pension savers with booked appointments in the Control group. As a result, this analysis explores the association between being in a Treatment group and attending an appointment, and not causality.

Figure 4: Incidence of attending a booked Pension Wise appointment within six weeks



**p<0.01, *p<0.05, +p<0.1

N = 372

Exploratory analysis

Impact of pension holder demographics

Further analysis was done to assess whether the results were impacted by the pension savers' age, gender, retirement pot size or other characteristics. No evidence was found that any of these characteristics impacted the results. The analysis has not been included in this report, but full results can be provided upon request.

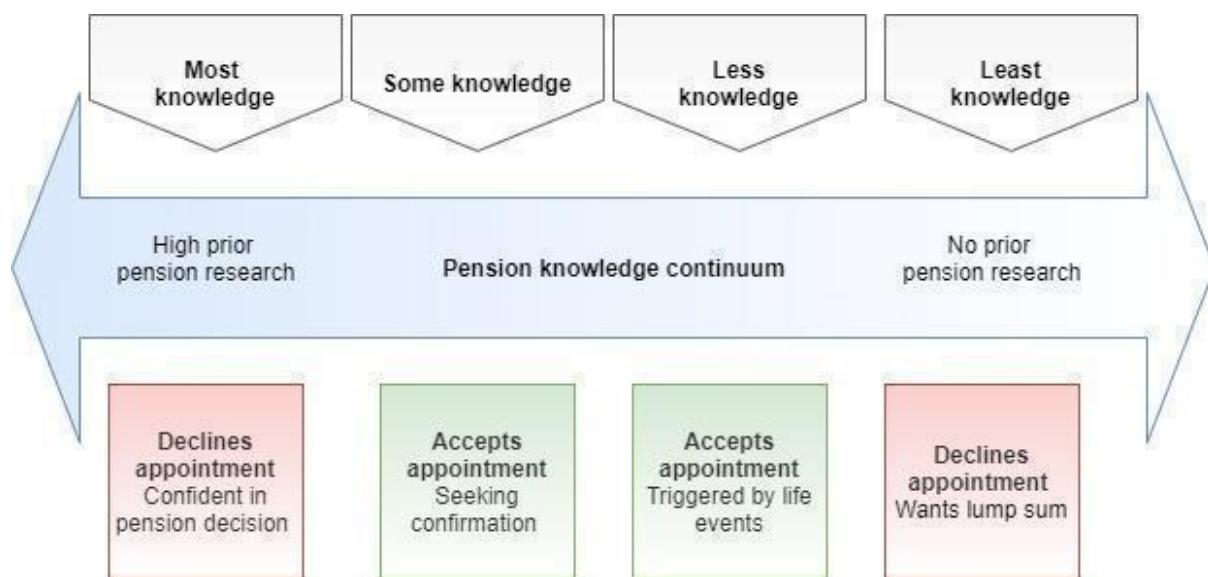
4.2 Implementation and process evaluation

The following sections set out the findings of the implementation and process evaluation. It discusses pension holder experiences of receiving the intervention and how different levels of perceived pension knowledge, as well as key life events, influenced agreeing to book a Pension Wise appointment. Finally, it discusses the delivery of the intervention from the staff perspective, experiences of training and staff fidelity to the intervention, as well as barriers and facilitators to delivery.

Perceived pension knowledge was a key factor influencing uptake of a Pension Wise appointment

Pension savers' perceived knowledge of the varying aspects of pensions was a key factor in their eventual decision to either accept or decline a Pension Wise appointment. Pension savers contacted their providers with differing levels of perceived pension knowledge, which directly influenced their decision to accept or decline an appointment when offered by pension provider delivery staff. The key factors influencing one's perceived pension knowledge were prior research about pensions, home ownership, owning additional investments and life events. Figure 5 gives an overview of the influence of perceived pension knowledge on pension savers' decision making.

Figure 5: The influence of perceived pension knowledge on accepting or declining a Pension Wise appointment



Pension savers who perceived themselves to have the most pension knowledge generally tended to have larger pot sizes, own their own homes, have additional investments outside of their pension and had been planning for retirement earlier than their less knowledgeable counterparts. The primary motivation for these

pension savers to contact their provider was typically to explore a specific decumulation option. The most knowledgeable pension savers interviewed as part of this analysis also tended to conduct independent research about their pensions, and in one potentially extreme case, this research began over a decade before their retirement.

"I've put myself through several pension courses over the years whilst I've been here, to try and learn a new system because it's all been brand-new to me obviously. I've been on five or six courses over probably the last ten or 12 years, just keeping up to date and learning stuff, and planning my own little life."

Pension savers who perceived themselves to have the least pension knowledge generally tended not to own their home, not have additional investments, not conduct prior research nor had they experienced life events which triggered reflection on their pension. The least knowledgeable pension savers typically lived 'day to day' and explained that they had not spent time thinking about their pensions prior to retirement or prior to calling their pension provider. The primary motivation for these pension savers was, in most cases, the acquisition of cash through a lump sum (either the tax free amount or a larger amount), driven by a belief that they had limited pension options available to them, and there was no value in exploring other retirement options as they described having a small pension pot size.

The most and least knowledgeable were the most confident in their decisions. When knowledgeable pension savers declined their appointment, they explained that they had conducted enough research independently and were confident that they wouldn't learn anything new from an appointment.

"Well, I think my view is that there's probably nothing that they [Pension Wise] could add to my knowledge."

During the intervention, call handlers logged the reason for a pension holder declining an appointment. Consistent with pension savers' reports, the most frequently given reason was that the pension holder felt they already knew enough, with 41% of those in Treatment 1/Online Booking and 35% in Treatment 2/Warm Transfer who declined an appointment or transfer citing this as a reason (see Appendix 4 for full breakdown).

When the least knowledgeable pension savers declined their appointment, they explained that they did not need an appointment as they only had one option available to them, and that they could manage this without guidance additional advice.

"I thought because I'm already getting a state pension, I thought there's no need to go for more advice because that's what I'm getting so I'll - you know, it's like a done deal already, isn't it? Advice for what, what do I need advice for?"

Some pension savers toward the upper-middle end of the knowledge continuum had conducted their own research but were not as confident in their planning as the most knowledgeable pension savers. They typically also owned their own homes, had larger pot sizes and additional investments. They wanted to ensure that their research was correct, and that they had collected all the available information and options.

"As I said, once [pension provider] had said to me, Before you consider it, we would recommend that you speak to somebody from the Pension Wise or a financial adviser'. In which case, because obviously with everything else I've done looking for that [pension] information, so the more information I get the more choices I can make."

Pension savers towards the lower-middle end of the knowledge continuum rarely conducted their own research and did not proactively plan for retirement, unlike the most knowledgeable pension savers. These less knowledgeable pension savers had a range of pension pot sizes and were less likely to have substantial additional investments compared to their more knowledgeable counterparts. They were more likely to be prompted to seek advice based on key life events. These pension savers were less active in pension planning than the most knowledgeable pension savers, but still considered pensions to be important and were, to varying extents, aware that there were different pension options and that they were entitled to guidance.

For some pension savers who had low levels of perceived pension knowledge, life events prompted them to start planning for retirement and subsequently seek guidance from their pension provider. One pension holder described how being made redundant on their 60th birthday prompted them to reflect on their lack of a plan and to start prioritising their future. Another pension holder described becoming more aware of the importance of pensions following the death of their spouse. For this pension holder, this drastic life event forced them to think about their future, where their spouse had previously been more responsible for retirement plans:

"I've given it some thought. I lost my husband two-and-a-half years ago. That forced my hand a little bit to thinking a bit more about what was going to happen to me. I haven't got enough of a pension that I could live on it. It's not going to give me enough return in the future so that I can comfortably live."

This demonstrates the potential impact of life events for pension savers approaching retirement age which fundamentally shift their retirement plans, as well as the uncertainty dramatic life changes can promote.

Overall, pension savers in the middle of the perceived knowledge continuum were most likely to accept a Pension Wise appointment. Those with some perceived pension knowledge and planning accepted an appointment to ensure they had all the information in addition to their own research and wanted confirmation that their research was correct. Those with less perceived pension knowledge and planning had typically been prompted by life events to begin looking at their retirement options.

Staff experiences: Improving training and delivery

The Stronger Nudge intervention was successful in getting more pension savers to accept Pension Wise guidance despite staff describing some challenges with the training process. The following section outlines elements of implementation that providers described went well, and elements where there was room for improvement.

Provider delivery staff

BIT, Pension Wise and providers prepared their staff through training that covered the background to the intervention, as well as training on what was required of staff to deliver either Treatment 1/Online Booking or Treatment 2/Warm Transfer.¹⁸

Providers were taking part in the Stronger Nudge evaluation voluntarily, using their own customer base as trial participants in a live environment and delivering training at their own cost. Training therefore varied according to provider business models and the level of resource allocated to trialling the intervention. Individual training models were generally preferred to group training models and were praised for giving staff an in-depth understanding of their responsibilities in delivering the intervention. Staff described some environmental challenges receiving training in a call centre environment which was described as distracting.

Training Materials

Both group and individual training sessions involved the dissemination of information packs designed by Pension Wise and BIT to staff, as well as accompanying slides containing information about the intervention. Whilst the content of the paperwork was praised for being comprehensive, it was suggested that the training materials

¹⁸ BIT prepared the scripts and Question and Answer sheets for call agents, Pension Wise provided detailed instruction materials on how to transfer calls to Pension Wise and on how to book an appointment. Each provider designed and delivered training sessions to their delivery staff. Once providers had delivered the training, BIT conducted dry-run sessions with call agents in each provider and fed back on any changes needed to ensure fidelity to the trial.

could have been designed with a busy call centre in mind, making them briefer and easier to read in between calls.

Training Practice

Training varied depending on the level of training resource available to the provider. The training ranged from a full day which included role plays and 1:1 script feedback to a short briefing with written instructions.

Training practice involved either group or individual practice calls, where delivery staff received feedback on the various aspects of their responsibilities, and which aspects of the script needed to be read verbatim and which parts could be adapted to suit the staff member's individual style. Individual sessions were viewed as the most helpful as trainers had time to provide detailed feedback.

Staff discussed environmental challenges during training. Individual training occurred at the staff member's work desk where staff found it challenging to distinguish between their usual day-to-day responsibilities and the responsibilities required to successfully deliver the intervention. It was suggested that the initial practice calls could have taken place in a separate room.

Delivering the script

Call handlers initially described the script as challenging to integrate into their calls, which impacted their confidence in delivering the intervention. The script was felt to be 'unnatural' and meant that staff had to interrupt their conversation and revert to the script, because prompts in the script had to be read at certain times.

It was so hard to go through the script when you're mid conversation with someone, to then just get your eyes down on your desk and start reading from the script. I felt like, because it's not how I speak, you sort of just, it instantly changed what I was saying.

Call handlers overcame this by adapting parts of the script which felt too 'forceful' and out of sync with the rest of the conversation and moderating the script to make it more fluid.

I think I went with my own words, to be honest. I didn't go word-for-word on the script. I think I included most of the key points, but I just put it in a way that felt more comfortable and flowed well with the conversation.

This was expressed consistently across all the providers; nearly all the call handlers reported adapting the script to their own style. Once these initial barriers with the script were overcome, call handlers typically found it easy to incorporate the intervention in their routine.

Once you got the hang of it - and we were chucked in the deep end, it was very different to start with - [...], so then after a while it felt comfortable and easy to offer it.

Facilitators and barriers to delivery

Facilitator to delivery: the guidance is free and impartial

Perhaps unsurprisingly, the fact that Pension Wise guidance was free and impartial was seen by staff as encouraging uptake of the appointments in both Treatment groups. All providers consistently emphasised this to pension savers in the Treatment groups and felt it to be a good engagement technique.

This was consistent with the pension holder interviews where participants described a key reason for agreeing to a Pension Wise appointment was that it was impartial.

I think it gives you more confidence or faith, because they're not (trying to push you one way or another) ... If somebody is trying to push you one way or the other, you sometimes wonder if they're doing it for a reason, for their own benefit.

Facilitator to delivery: the booking process is simple and convenient

Furthermore, a simple and convenient booking process influenced uptake of Pension Wise guidance. All providers' staff reported that the booking or transfer process was convenient and easy to manage. Staff found it convenient to have access to the Pension Wise booking system, and equally felt being able to give the option of a face to face appointment or a telephone appointment was a mechanism of engagement with pension savers. Providers felt the transfer process was easier for them as delivery staff, compared to the booking process as it saved them time during the call.

The convenience of booking an appointment was also reflected by pension savers, one of whom described being able to book an appointment over the phone with Pension Wise immediately as a key factor in their decision-making process.

I thought that had I just been given a number, I might have just written the number down and maybe somebody mightn't have, I'm not going to bother with that. The fact that no, you hold on, are you happy to hold on and I can transfer you right now, and you're connected with someone within a minute, I think is very good. It's very smooth and seamless.

Barrier to delivery: Perception that the call would take a long time

Providers noted that during the call, some pension savers were put off taking an appointment because they thought it would take too long. As part of the script, call handlers would highlight that the length of Pension Wise appointment was 45 minutes. Call handlers described how some pension savers disengaged from considering an appointment due to the perceived inconvenience of the length of the appointment.

In contrast, from the pension holder interviews, those who did have a Pension Wise appointment typically reported being happy with the appointment length as it meant that the information covered was thorough and allowed them to go through all their options.

Barrier to delivery: The offer of a booking or transfer to Pension Wise was seen as a barrier to decumulation

Being offered a Pension Wise appointment by booking or transfer was viewed as an inconvenience by some pension savers. Staff at all providers felt that a proportion of pension savers viewed even the offer of an appointment as a barrier to accessing their pension pot:

I feel that's the same as it's always been, they [the pension holder] just feel as if it's just another step or something, they just want to get on with it, like [other agent] said, I just want my tax free cash and if I have to wait until next week to book something, that's just going to delay it even more.

This was consistent with pension holder reports. For example, pension savers who had small pension pots and had a clearly-set plan that they were going to take their lump sum did not see the point in taking a Pension Wise appointment.

All I knew is I wanted to ring them up and get the lump sum. I had one aim to get the money, that was it, so I wasn't really interested in any other alternatives at that point.

4.3 Implementation and process evaluation conclusion

The qualitative interviews with pension savers identified that those with the most and least perceived pension knowledge were most likely to decline a Pension Wise appointment. On balance the intervention was successfully implemented, despite some initial implementation issues with delivery of the script.

5. Conclusion

The report presented encouraging findings from the impact of the Stronger Nudge interventions on the take-up of Pension Wise guidance. Both variations of the intervention - Online Booking and Warm Transfer - were successful at increasing the number of pension savers receiving Pension Wise guidance compared to business as usual. Amongst those pension savers who did not report having had advice or guidance before, the stronger nudge interventions increased pension guidance uptake by 8 percentage points from a baseline of 3%.

These results compare favourably against other interventions which make use of nudges. Comparative research¹⁹ found that nudges on average increased binary outcomes by 1.4 percentage points from a baseline of 17.4%. The size of these interventions' impact is over 8 times that of an average Nudge Unit trial and almost twice as large as the effects found in academic studies.²⁰

The evaluation found that the Online Booking and Warm Transfer interventions were similarly impactful. Using pension providers to book guidance appointments directly was as effective at encouraging take up of guidance as relying on Pension Wise agents to explain the guidance and make bookings. Each approach offers different advantages. The Online Booking intervention would be less labour intensive to implement at scale for Pension Wise, while the Warm Transfer would decrease the burden placed on providers to schedule appointments.

The research also shed light on some of the reasons why pension savers decide not to take guidance. Many felt that they had already made their decision and didn't need further help, or already knew enough having previously had guidance or advice, or had undertaken their own research. Qualitative interviews revealed that those who reported that they were still exploring their retirement options (25% of the sample of pension savers who were interviewed by telephone) were more likely to opt to have guidance compared to those who had already researched their decumulation options in detail and had a concrete plan (75% of the sample).

The trial was successfully implemented, despite some initial issues with delivery of the script which the call handlers were able to overcome. Overall, delivery staff found the interventions easy to implement and did not report substantial issues with either the booking or the warm transfer system. Some of the staff suggested they would appreciate more one-to-one training and tailored feedback, but provider business-models meant that this was not always possible. They suggested that the pitch was

¹⁹ Della Vigna, S., Linos, E. (2020 . RCTs to Scale: Comprehensive Evidence from Two Nudge Units. Working Paper, UC Berkeley.

²⁰ Nudge Unit trials: Cohen's $h = 0.04$; Academic trials: Cohen's $h = 0.19$; Current trial bookings : Cohen's $h \approx 0.42$; Current trial attendance): Cohen's $h \approx 0.34$. Cohen's h is a measure of the difference between two proportions and is generally interpreted as follows: $h = 0.20$: small effect size, $h=0.50$: medium effect size and $h=0.80$: large effect size.

formulaic and preferred to adopt a more fluid style which was not entirely script based. An alternative might see the pitch framed as a guide, for example, which provides behaviourally informed suggestions that call handlers could use to encourage the take up of guidance.

Appendices

Appendix 1: The Stronger Nudge interventions

High-level intervention concepts were developed by MaPS following scrutiny of existing research and discussions with stakeholders and pension providers.

Treatment 1/Online Booking	When a pension holder contacted their provider to seek to access their pension, the provider explained the nature and purpose of guidance and offered to book the pension holder a Pension Wise appointment directly, using the Pension Wise online booking tool. The offer was presented as a normal part of the access journey. If the pension holder declined the offer, the scheme recorded it and captured the reason for not booking an appointment.
Treatment 2/Warm Transfer	When a pension holder contacted their provider to seek to access their pension, the provider 'warm transferred' the pension holder to Pension Wise, so that Pension Wise could explain the nature and purpose of guidance and offer to book the pension holder a guidance appointment. If the pension holder declined to be transferred, the scheme recorded it and captured the reason why. If the warm transfer was successful and the pension holder then decided not to book the appointment, Pension Wise recorded it and captured the reason for not booking an appointment.

The offer of guidance was accompanied by a pitch informed by insights from behavioural science including defaults, social norms, loss aversion, endowment effect and reciprocity.²¹

Treatment 1/Online Booking	Pension holder calls the provider in order to access their pension pot. Agent: "OK, No problem. <i>The next step in the process</i> then is to get you booked in for a Pension Wise guidance appointment. This
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²¹ For explanation of these terms and other behavioural science concepts, see Behavioural Insights Team. 2014). EAST Four simple ways to apply behavioural insights. https://www.behaviouralinsights.co.uk/wp-content/uploads/2015/07/BIT-Publication-EAST_FA_WEB.pdf

	<p><i>is an impartial service to help you understand your options for retirement. You are entitled to a 45-minute phone or face-to-face session at no cost to you.</i></p> <p>Feedback from customers who have had Pension Wise guidance was really good. I can book an appointment for you right now.”</p>
Treatment 2/Warm Transfer	<p>Pension holder calls the provider in order to access their pension pot.</p> <p>Agent: “OK, No problem. The next step in the process then is to get you booked in for a Pension Wise guidance appointment. This is an impartial service to help you understand your options for retirement. You are entitled to a 45-minute phone or face-to-face session at no cost to you.</p> <p>Feedback from customers who have had Pension Wise guidance was really good. I can transfer you to Pension Wise who can book an appointment for you right now.”</p> <p>If the pension holder agrees to be transferred to Pension Wise:</p> <p>Teleperformance agent: “As your pension provider mentioned, you are entitled to an impartial pensions guidance session at no cost to you. During the session, which takes about 45 minutes, you will talk to a pension specialist about the options you have for taking the money in your pension, so that you can better understand how these different options affect your income in retirement. 95% of people who had an appointment said they were likely to recommend it to others.</p> <p>You can talk to the pensions guidance specialist over the phone or face to face somewhere local to you. Would you like me to book an appointment for you?”</p>

Control Group

Each provider's standard interaction with customers is unique, but they should cover the following common points

Pension holder calls the provider in order to access their pension pot.

Points to cover:

- Have they received and read the Retirement Options Pack?
- Have they spoken to a Financial Advisor in the last 12 months? – recommend they take financial advice and where they can find it if unsure - Pension Wise, MAS, Unbiased, FAST, if unavailable please arrange a call back: Advice Call Back Form
- If MHRIS flag shows on FLEM: Have you seen the letter from your trustees in your Retirement Options Pack? It explains how you can get help with some of your options
- Have they spoken to Pension Wise? –recommend Pension Wise, it's a free and impartial guidance service. Does the customer want their contact details? 0800 138 3944 UK - Monday to Sunday from 8am-10pm, +44 203 733 3495 overseas; www.pensionwise.gov.uk
- Is the customer happy to proceed on a non-advised basis?

Appendix 2. Recruitment of interview participants

The participants were recruited in one of two ways:

- 1 Participants who accepted their appointments were recruited through nominated recruitment assistants at MaPS (as MaPS had access to their personal data). An email was sent by MaPS to trial participants with a link to a survey inviting participants to take part in a telephone interview. The survey collected the diversity criteria which was used to purposively sample. BIT staff contacted participants to arrange interview dates and times.
- 2 Participants who declined their appointments were recruited through nominated assistants at each of the 3 providers. The participant recruitment process was the same as above.

Participants were provided with a £15 e-voucher as compensation.

Table 1. Sampling table for pension holder interviews n=18 by provider n of participants who fitted each criteria)

Criteria	Provider	AVIVA n 5	Hargreaves Lansdown n 6	Legal & General n 7
Appointment	Accepted	2	1	4
	Declined	1	5	3
Age	50-54	0	0	1
	55-64	1	3	5
	65+	3	3	1
Pot size	Less than 30k	3	0	2
	More than 30k	2	5	4
Gender	Male	3	6	5
	Female	2	0	2
Employment	Retired	4	4	3
	Not retired	1	2	4
Treatment arm	Treatment 1	1	2	1
	Treatment 2	1	1	3
	Unknown	3	3	3

Table 2. Sampling table for staff focus groups by provider

Provider	N participants in total	N of focus groups
Hargreaves Lansdown	6	1
AVIVA	5	1
Legal General	6	3

Appendix 3. Technical appendix

Balance checks

Balance checks constitute comparing the means of characteristics (e.g. gender, age across the different Treatment arms to ensure they are not significantly different. This is required to confirm the randomisation was successful and thus establish whether the Treatment and Control groups are comparable.

Provision of guidance

We performed a balance check on whether the pension holder reported having received pension advice or guidance in the 12 months prior to getting in touch with their pension provider (as per eligibility criteria) to assess whether pension savers in each Treatment arm were as likely to report receiving guidance.

This was done using an ordinary least squares (OLS) regression while controlling for the impact of pension providers. Table 3 presents the results from regressing Treatment on the propensity to report guidance. Each coefficient represents the observed difference in mean between the named category and the base category (identified as base in the table). The first value in red indicates that the proportion of pension savers in Treatment who indicated receiving guidance is 1.8 percentage point higher than the proportion of pension savers in the Control group (base category).

However, this observed difference is not statistically significant. In conclusion, once the impact of providers is taken into account, we do not find significant differences in the proportion of pension savers who reported receiving pension guidance or advice in the 12 months prior to the trial, across Treatment groups. Thus we do not have concerns over the comparability of the Treatment arms after removing the pension savers who indicated receiving guidance.

Table 3: Provision of past guidance and/or advice by Treatment condition

Pension holder received pension guidance/advice in the last 12 months						
		No	Yes		Not clear	
Treatment base: Control group						
<i>Treatment 1</i>		0.011 (0.014)	0.018 (0.014)		-0.029	0.010)
<i>Treatment 2</i>	-0.034	0.013)	0.016 (0.014)		0.018+	0.011)
Provider base: Aviva)						
<i>Hargreaves Lansdown</i>	-0.530	0.010)	-0.274	0.012)	0.804*	0.009
<i>Legal General</i>	0.050*	0.018	-0.172	0.016)	0.122*	0.013

Constant	0.537*	0.012	0.375*	0.012	0.088*	0.007
N	5,653		5,653		5,653	

Standard errors in parentheses

Balance checks on covariates

With the exception of the pension holder's reason for calling their pension provider (i.e. call subject), all variables are balanced across Treatment groups, controlling for pension providers. Table 4 presents the balance check for the covariates with the full sample and Table 5 presents the same analysis but excluding pension savers who received guidance. In the last column (i.e. Subjects), we find the only statistically significant difference. Pension savers in Treatment 1 were significantly more likely to call to explore retirement options than the pension savers in the Control and Treatment 2 groups.

This imbalance is mostly caused by Hargreaves Lansdown pension savers assigned to the Treatment 1/Online Booking intervention being almost twice as likely to call to explore retirement options than those who were allocated to the Control group or Treatment 2/Warm Transfer. Aviva pension savers in both Treatment groups were less likely to be exploring options, while the same Legal General participants were more likely to be doing so than those randomised into the Control group. We control for call subject in all analyses included in this report, thus we do not suspect this imbalance is biasing results.

Table 4: Balance checks before removal of those who received pension advice or guidance in the 12 months prior to the trial

	Gender ²²	Age	Valuation	Subject ²³
Treatment base: Control group				
Treatment 1	0.010 (0.015)	0.122 (0.167)	977.038 8989.684)	0.080* 0.013
Treatment 2	0.013 (0.016)	-0.053 0.169)	-5277.891 7087.714)	0.000 (0.013)
Provider base: Aviva)				
Hargreaves Lansdown	-0.146 0.014)	1.577* 0.175	162070.608 9399.448)	0.299* 0.013
Legal General	0.143* 0.018	-0.197 0.165)	-25717.051* 4206.568)	0.539* 0.016

²² Value of 0 indicates 'Male' while the value of 1 denotes 'Female', 4 missing values were excluded.

²³ Value of 0 indicates 'To ask for a specific decumulation option' while the value of 1 denotes 'To explore retirement options', 34 missing values were excluded.

Constant	0.401*	0.013	61.269	0.131)	45895.462 4464.072)	0.058*	0.008
N	5,649		5,653		5,653	5,619	

Standard errors in parentheses

Table 5: Balance checks after removal of those who received pension advice or guidance in the 12 months prior to the trial

	Gender ²⁴	Age	Valuation	Subject ²²⁵
Treatment base: Control group				
Treatment 1	0.003 (0.018)	0.107 (0.202)	-7984.284 7973.524)	0.094* 0.016
Treatment 2	0.027 (0.018)	-0.068 0.201)	-6907.961 9059.803)	-0.003 0.016)
Provider base: (Aviva)				
Hargreaves Lansdown	-0.166 0.017)	1.673* 0.198	172431.939 9572.036)	0.299* 0.015
Legal General	0.127* 0.021	-0.261 0.197)	-18534.055* 2505.882)	0.534* 0.019
Constant	0.419* 0.015	61.294 0.162)	39012.394 5067.454)	0.075* 0.011
N	4,133	4,135	4,135	4,113

Standard errors in parentheses

Sample Characteristics

Table 6 breaks down the full sample of 5,653 pension savers (columns 1 – 2) and the trial sample of 4,135 pension savers (columns 3 – 4). The trial sample was not evenly distributed across Treatment groups, with 44% of participants going through the Control group, and 28% and 27% going through Treatment 1/Online Booking and Treatment 2/warm transfer respectively. A similar trend is also observed in the full sample. BIT followed up with the providers to try to understand why this happened but didn't receive a plausible explanation. The difference in sizes across the groups is not a cause for concern. This is demonstrated by the balance checks which were undertaken and which confirmed that the three groups had similar characteristics and were not therefore impacted by their differing size.

²⁴ Value of 0 indicates 'Male' while the value of 1 denotes 'Female', 2 missing values were excluded.

²⁵ Value of 0 indicates 'To ask for a specific decumulation option' while the value of 1 denotes 'To explore retirement options', 22 missing values were excluded.

Table 6: Sample characteristics breakdown

Variable	Number including pension savers who received guidance	Percentage including pension savers who received guidance	Number excluding pension savers who received guidance	Percentage excluding pension savers who received guidance
Treatment				
<i>Control group</i>	2,394	42.4	1,825	44.1
<i>Treatment 1</i>	1,694	30.0	1,175	28.4
<i>Treatment 2</i>	1,565	27.7	1,135	27.5
Provider				
<i>Aviva</i>	2,837	50.2	1,740	42.1
<i>Hargreaves Lansdown</i>	1,723	30.5	1,534	37.1
<i>Legal General</i>	1,093	19.3	861	20.8
Gender				
<i>Male</i>	3,442	60.9	2,512	60.8
<i>Female</i>	2,207	39.0	1,621	39.2
<i>Unknown</i>	4	0.1	2	0.1
Region				
<i>East Midlands</i>	335	5.9	216	5.2
<i>East of England</i>	379	6.7	244	5.9
<i>Greater London</i>	463	8.2	341	8.3
<i>North East</i>	344	6.1	225	5.4
<i>North West</i>	512	9.1	338	8.2
<i>Northern Ireland</i>	63	1.1	40	1.0
<i>Overseas</i>	41	0.7	24	0.6
<i>Scotland</i>	291	5.2	201	4.9
<i>South East</i>	520	9.2	337	8.2
<i>South West</i>	399	7.1	258	6.2
<i>Wales</i>	163	2.9	104	2.5
<i>West Midlands</i>	391	6.9	255	6.2
<i>Unknown</i>	1,752	31.0	1,552	37.5
Had advice or guidance in the past 12 months				
<i>No</i>	2,141	37.9	2,141	51.8
<i>Yes</i>	1,518	26.9	0	0.0

<i>Not clear</i>	1,994	35.3	1,994	48.2
Call subject				
<i>To ask for a specific decumulation option</i>	4,068	72.0	2,792	67.5
<i>To explore retirement options</i>	1,551	27.4	1,321	32.0
<i>Unknown</i>	34	0.6	22	0.5
Total	5,653	100	4,135	100

Table 7 summarises key sample characteristics of the pension savers included in the trial sample. The mean age of pension savers included is 62 years old, while the mean pot size is £94,945 and the median pot size £21,000. This distribution, and the high value of the standard deviation, indicates that a small proportion of pension savers have significantly larger pots than the majority. The statistics illustrate that the majority of appointments were booked and attended within 6 weeks. Across the sample, we observed 7% of pension savers who had not received advice or guidance in the last 12 months receive guidance within 6 weeks, while 8% received guidance within the whole trial monitoring period.

Table 7: Descriptive statistics

	Mean	Standard deviation	Median
Age	61.87	5.36	61.25
Pot size	94,945.13	252,647.30	21,000
Appointments booked within 6 weeks	0.09	0.29	-
Appointments attended within 6 weeks	0.07	0.26	-
Appointments booked	0.10	0.30	-
Appointments attended	0.08	0.27	-

Trial results

This section presents the detailed trial findings which are summarised in the main report.

We initially planned to use OLS estimation for ease of interpretation, however as the baseline probability of booking and attending were lower than we anticipated we decided to use logistic estimation for better prediction. Logistic regressions return odds ratios instead of coefficients (from OLS regressions). Odds ratios describe the odds of an event occurring (e.g. attending an appointment) for a group (e.g. Treatment 1/Online booking) over another group (e.g. Control group). An odds ratio of 2 can be interpreted as twice as likely to see an event happen, while an odds ratio of 1 implies an event is equally likely to happen to both the groups being compared. Odds ratios are difficult to interpret and as a result are typically translated into marginal effects, which quantify the estimated effect. The marginal effects are presented on the bar charts included in the results section.

We adjusted the standard errors to account for the fact that randomisation was clustered at the call handler level, as we expect that the outcomes for pension savers who interacted with the same call handler will be correlated i.e. related to each other).

Column i) presents the regression without controlling for covariates and region fixed effects and column (ii) presents the same regression including additional covariates (e.g. pot size) and fixed effects. This approach allows us to check the robustness of our findings by checking whether the addition of covariates and fixed effects affects the results. The main results are presented in column (ii) and include covariates and fixed effects in the model.

Primary analysis

Proportion of pension savers who booked a Pension Wise appointment

Table 8 below presents results from a logistic estimation of the impact of the interventions on the proportion of participants booking a Pension Wise appointment. The pension savers in both Treatment groups are significantly more likely to book a Pension Wise guidance appointment. The pension savers in both Treatments have between 66% and 71% greater odds of booking an appointment, as observed in column (ii). These findings are statistically significant.

Table 8: Primary analysis of the impact of the interventions on the incidence of booking a Pension Wise appointment

	i incidence of booking an appointment	ii incidence of booking an appointment
Treatment base: Control		
Online Booking	1.671* 0.232	1.655* 0.224
Warm Transfer	1.629* 0.177	1.705* 0.175
Provider base: Aviva)		
Hargreaves Lansdown	-0.012 0.256)	0.360 (0.899
Legal General	0.789* 0.275	0.015 (0.285
Pot size		0.000* 0.000)
Gender base: Male)		
Female		0.046 (0.120
Age		-0.025 0.009)
Reason for call base: Specific decumulation option		
To explore retirement options		1.494* 0.218
Unknown		-0.624 1.300)
Region fixed effects		
Constant	-3.667 0.198)	-2.358 0.664)
N	4,135	4,109 ²⁶

Cluster adjusted standard errors in parentheses

Proportion of pension savers who attended a Pension Wise appointment

Table 9 below presents results from a logistic regression which estimates the impact of the interventions on the proportion of participants booking and attending a Pension Wise appointment. The findings in each column refer to the differences in the odds ratio between the Treatment and Control groups. For the purpose of interpretation, the odds ratios were transformed to simple proportions for the key findings figures in the main report. The findings in column (ii) indicate pension savers

²⁶ Two missing values of gender were excluded, alongside 24 observations where participants were located overseas. Both predicted failure perfectly.

in both Treatment groups were significantly more likely to attend an appointment than pension savers in the Control group. Their odds of attending an appointment are between 46% and 50% greater.

Table 9: Primary analysis of the impact of the interventions on the incidence of booking and attending a Pension Wise appointment

	i incidence of attending an appointment	ii incidence of attending an appointment
Treatment base: Control		
Online Booking	1.521* 0.249	1.504* 0.236
Warm Transfer	1.398* 0.175	1.457* 0.168
Provider base: Aviva)		
Hargreaves Lansdown	-0.067 0.263)	0.026 (0.869
Legal General	0.744* 0.281	0.023 (0.294
Pot size		0.000* 0.000
Gender base: Male)		
Female		-0.041 0.149)
Unknown/Other		0.000 .
Age		-0.013 0.011)
Reason for call base: To ask for a specific decumulation option		
To explore retirement options		1.422* 0.221
Unknown		-0.417 1.313)
Region fixed effects		
Constant	-3.746 0.210)	-3.157 0.731)
N	4,135	4,069 ²⁷
Cluster adjusted standard errors in parentheses		

²⁷ Two missing values of gender were excluded, alongside 24 observations where participants were located overseas and 40 observations of participants from Northern Ireland. All predicted failure perfectly.

Exploratory analysis

Table 10 below presents non-causal results of an exploratory analysis which aimed to assess differences in frequency of cancellations of booked appointments across Treatment groups. The results indicate that being in Treatment 1 is associated with lower odds of attending an appointment after an appointment is booked. This result is not statistically significant. Being in Treatment 2 group is associated with the lowest odds of attending an appointment once it is booked.

Table 10: Incidence of attending a booked Pension Wise appointment

	i Incidence of attending a booked appointment	ii Incidence of attending a booked appointment
Treatment base: Control		
Online Booking	-0.784 0.529)	-0.724 0.526)
Warm Transfer	-1.092 0.524	-0.993+ 0.509)
Provider base: Aviva)		
Hargreaves Lansdown	-0.240 0.228)	-12.284* 0.943
Legal General	-0.074 0.194)	0.131 (0.260
Pot size		0.000* 0.000)
Gender base: Male)		
Female		-0.342 0.301)
Age		0.060* 0.030)
Reason for call base: Specific decumulation option		
To explore retirement options		-0.246 0.338)
Unknown		0.000 .
Region fixed effects	No	Yes
Constant	2.263* 0.519	-1.519 1.809)
N	376	372 ²⁸

²⁸ One missing value of reason for call and three observations from Northern Ireland were dropped as they predicted failure perfectly.

Cluster adjusted standard errors in parentheses

Robustness checks

Table 11 below presents results of survival analysis which intended to establish long-term booking patterns across Treatment groups. The analysis was conducted using a Cox regression, with standard errors clustered at a call handler level to account for the clustered nature of the randomisation.

The results indicate that pension savers in both Treatment groups were both more likely to book an appointment and more likely to attend an appointment. The hazard ratio in column i) suggests being in either one of the Treatment groups associated with a 30% increase in the incidence of booking an appointment. The hazard ratios in column (ii) are slightly lower and suggests that being in one of the Treatment groups is associated with a 25% to 30% increase in the incidence of attending an appointment. All the findings described are statistically significant.

Table 11: Exploratory analysis of timing of appointment bookings

	i Incidence of booking an appointment	ii Incidence of attending an appointment
Treatment base: Control		
Online Booking	1.330* 0.183	1.299* 0.206
Warm Transfer	1.305* 0.141	1.247* 0.151
Provider base: Aviva)		
Hargreaves Lansdown	0.403 (0.861	0.097 (0.871
Legal General	0.089 (0.250	0.037 0.265
Pot size	0.000* 0.000)	0.000* 0.000
Gender base: Male)		
Female	0.031 (0.099	-0.068 0.123)
Unknown/Other	-43.199 . ²⁹	-32.364* 1.021
Age	-0.024 0.008)	-0.014 0.009)
Reason for call base: To ask for a specific decumulation option		

²⁹ This is the regression output and is not an error. This is due to there not being enough unknown observations to estimate the standard error.

To explore retirement options	1.242*	0.190	1.299*	0.196
Unknown	-0.720	1.250)	-0.486	1.279)
Region fixed effects	Yes		Yes	
N	4,134		4,126	

Cluster adjusted standard errors in parentheses

The results from the survival analysis are presented visually in survival curves, which illustrate the proportion of pension savers who had booked (Figure 6) or attended (Figure 7) at different time points. In Figure 6, we can see that the difference in proportion of bookings made between the Treatment and Control arms occur straight away. As expected, the difference in proportion of Pension Wise appointments attended between the Treatment and Control arms, represented by the gap between the blue and green lines and the grey line, emerges gradually.

Figure 6: Proportion of appointments booked with respect to time from initial call

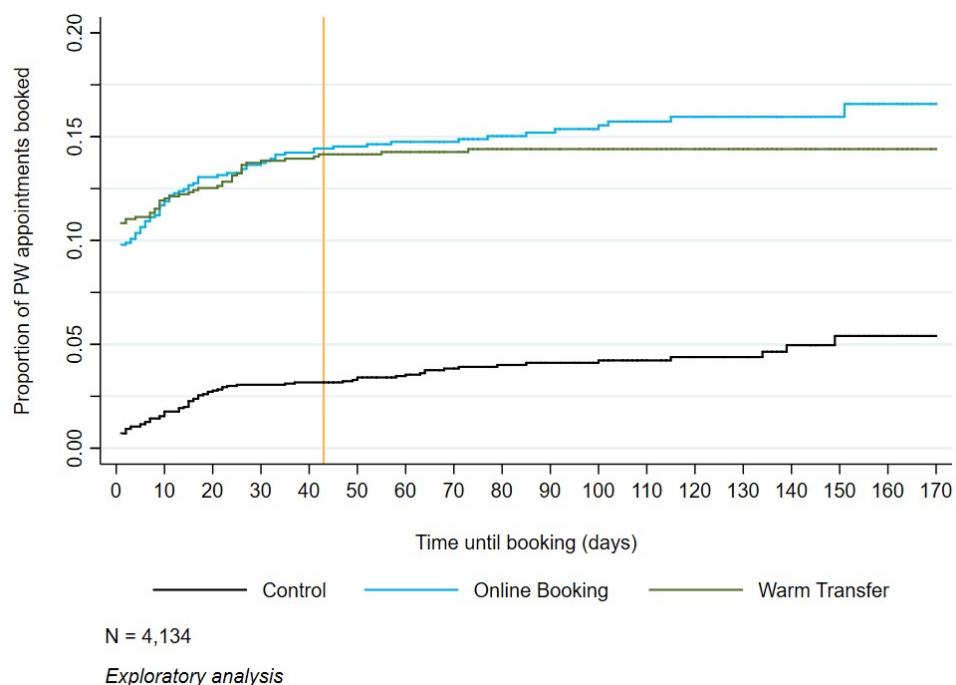
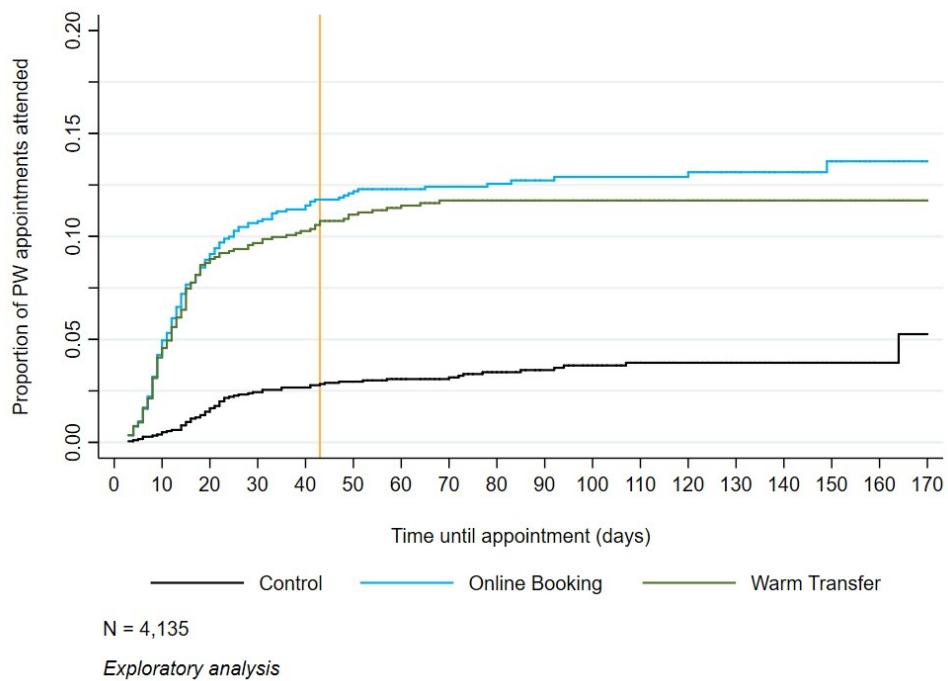


Figure 7: Proportion of appointments attended with respect to time from initial call



Appendix 4. Reasons for not participating in Stronger Nudge

Table 12 shows a breakdown of the reasons given by pension savers for declining a Pension Wise appointment recorded by the providers' staff. It suggests that there were no major areas of difference between reasons given for declining amongst pension savers in the two Treatments. Sufficient previous knowledge was the most common reason given for declining an appointment, not wishing to do it at the current time and unknown reasons were the next most common reasons cited.

Table 12: Logged reasons for declining an appointment

Reason not booked/transferred	Treatment 1	Treatment 2
<i>Not interested - already knows enough</i>	41%	35%
<i>Didn't want to do it now might do it on their own, later</i>	23%	25%
<i>Wanted to access their pot now/Didn't want to wait for the guidance</i>	6%	4%
<i>Interested but no suitable dates</i>	<1%	-
<i>Interested but no suitable location</i>	<1%	-
<i>Wasn't able to reach Pension Wise (took too long - more than 30 seconds)</i>	-	<1%
<i>Call ended unexpectedly</i>	<1%	<1%
<i>Other</i>	11%	6%
<i>Unknown</i>	18%	27%
Sample size	1,175	1,135