



# 2017 INTERNATIONAL HEALTH POLICY SURVEY OF OLDER ADULTS (65+) METHODOLOGY REPORT

Prepared by:

Robyn Rapoport, VP Health Care, Public Policy & International Research  
Erin Czyzewicz, Director of Research & Insights – Health Policy Program





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## OVERVIEW

The Commonwealth Fund (the Fund) is a private foundation dedicated to promoting a health care system that achieves better access, improved quality, and greater efficiency, with a focus on society's most vulnerable groups. As part of its mission, the Fund has been conducting the International Health Policy (IHP) Survey in 11 countries for more than a decade. In a triennial cycle, the IHP survey targets different populations, including physicians, older adults, and the general adult population.

The Commonwealth Fund contracted with SSRS to manage data collection and data integration for the 2017 IHP survey conducted among adults age 65+ in Australia, Canada, France, Germany, the Netherlands, New Zealand (NZ), Norway, Sweden, Switzerland, the United Kingdom (UK), and the United States (US). SSRS fielded the survey in the US and Canada. SSRS's fielding partner, European Fieldwork Group (EFG) fielded the survey in Australia, France and New Zealand. GDCC fielded the survey in Germany, the Netherlands, and the UK. SSRS's fielding partner, Norstat fielded the survey in Norway. Switzerland contracted with the M.I.S. Trend to field the survey in Switzerland. Sweden contracted with Institutet för kvalitetsindikatorer AB (Indikator) to manage the data collection process and field the instrument in Sweden.

The study was conducted via landline and mobile telephone in each country with a nationally representative sample of respondents, age 65 and older. Switzerland also offered an online option. Fieldwork took place between March 1 and June 16, 2017.

The 2017 study was designed to explore and collect reliable health-related data for the following topics:

- Patient's access to primary and preventive care, including promptness of attention, such as availability of same-day appointment
- Patient's relationship with regular doctor/GP, including experience with coordination of health care
- Patient's use of and experience with specialists
- Experiences with prescription medication
- Patient's experience with care in the hospital & emergency room
- Care assistance and informal caregiving
- Patient's overall health and medical conditions
- End of life care wishes
- Health care coverage, affordability of care, experience with administrative/financial burdens, and out-of-pocket costs

This report is organized into five sections. The first section discusses the sample design. The next section describes data collection and fielding. The final three sections address the response rate to the survey, weighting procedures, and project deliverables.

## SAMPLING METHODS

Survey coverage refers to the extent to which the sample frame for a survey includes all members of the target population. A survey design with a gap in coverage raises the possibility of bias if the individuals missing from the sample frame (e.g., households without telephones) differ from those in the sample frame. For all countries included in IHP 2017, efforts have been made to ensure a representative and diverse sample that covers the target population – adults, ages 65 and older.



Notably, cell phone-only households are increasing throughout the world. In the United States, for instance, according to the July to December National Health Interview Survey (NHIS), 50.5% of households were estimated to be cell phone-only in the second half of 2016 (Blumberg & Luke, 2016), as compared to 20.2% in 2008. Further, in the US, as of December 2016, 23.5% of adults 65+ are estimated to be cell phone only.

In some European countries, the share of 65+ adults in living in households answering only cell phones is still relatively small compared to the U.S., however, this share is increasing, and the coverage-gap caused by excluding cell phones from survey samples will continue to widen. Thus, the Fund and its partner countries chose to include cell phones in the sampled population for most countries for IHP 2017. Since adults ages 65 and older are less likely to live in a cell phone only (CPO) household than are respondents under age 65 and cell phone interviews are more costly than landline interviews in most countries, the share of interviews completed on cell phones for IHP 2017 is somewhat lower than it would be for a general population survey. The 2017 sample frame for Canada, France and Germany included only landline sample because coverage using landline sample only was deemed sufficient by the Fund and country partners and the costs of including cell phone interviews was prohibitive.

An overlapping-frame telephone design was used for the US, Australia, New Zealand, the Netherlands, and the UK. This means that those respondents whose household answers both landlines and cellphone phones had a higher likelihood of selection – an issue that was addressed in weighting. The overlapping-frame approach allowed reaching respondents who receive most of their calls on cell phones, and are far less likely to be reached on a landline. As a result, the overlapping design produced a more nationally representative sample of respondents, age 65 and older, which reduced the design effect associated with post-stratification weighting corrections.

Norway used an individual sample of adults, 65+ drawn by Bisnode, a nationwide registry. Respondents who had both a landline and cellphone number associated to their name had a higher likelihood of being reached – an issue that was addressed in weighting.

Switzerland used an individual sample of adults, 65+ drawn by the Swiss Federal Statistical Office (SFSSO), using a nationwide population registry. Respondents in Switzerland could complete the survey online or by telephone. For Sweden landline and cell phone sample for individuals 65 and older was drawn from the Marknadsinformation AB registry.



**TABLE 1: Total Interviews by Sampling Frame**

	Landline	LL (%)	Cell Phone	CELL (%)	Web	WEB (%)	Total
Australia	2,000	80%	500	20%	-	-	2,500
Canada	4,549	100%	-	-	-	-	4,549
France	750	100%	-	-	-	-	750
Germany	751	100%	-	-	-	-	751
Netherlands	675	90%	75	10%	-	-	750
New Zealand	400	80%	100	20%	-	-	500
Norway	40	5%	710	95%	-	-	750
Sweden	3,500	50%	3,500	50%	-	-	7,000
Switzerland	1094	34%	61	2%	2083	64%	3,238
United Kingdom	703	93%	50	7%	-	-	753
United States	1,116	80%	276	20%	-	-	1,392

## Sample Generation by Country

### Australia

In Australia, the landline and cell phone RDD sample was drawn by Sample Solutions Europe (SSE). The generation of the landline sample frame was based on the phone number blocks used in the telephone numbering plan provided by the Australian Communications and Media Authority. The random digit length N is set up for each of the different blocks. This means there is always a starting block for each region and division within Australia followed by a random allocation of numbers of two to four unknown numbers. This leads to a more efficient usage of higher populated numbering blocks. The landline sample for the main Australia sample was stratified by Australia’s seven regions to ensure geographic representativeness. Cell phone sampling in Australia was based on number blocks consisting of three- or four-digit exchanges (varying by cell phone provider). The SSE cell phone sample maintained an equal probability of selection method (epsem) approach by accounting for the effect of the differences in the size of the cell phone number-blocks. SSE also uses an electronic number verification procedure to filter out invalid phone numbers to improve sample efficiency.

To allow for region-specific analysis, the final sample for Australia included oversamples of (1) the Victoria population to complete a total of 1,000 interviews and (2) the New South Wales population to complete a total of 1,000 interviews.

### Canada

Sampling in Canada was done through SM Research, a company founded in 1976 and now is merged into Environics Analytics (EA). EA’s sampling method begins with numbers produced by selecting the first eight digits of known exchange banks (also called NPA-NXX-Banks) and then randomly generating the last two digits to form the RDD frame. RDD samples can then be randomly generated from the frame. To improve efficiency, NPA-NXXs considered “not-in-service” and listed business numbers are removed. This RDD design covers more than 95% of in-service landline/cellphone numbers.

### France and Germany

Sample for France and Germany was generated by SSE. For each country, the generation of the landline RDD frame was based on the phone number blocks used in the telephone numbering plan using pre-codes by region and stratified by provider distribution. On the basis of the numbering plan, a probabilistic design for pulling “seed” blocks



from which actual phone numbers were generated was used. Wherever possible the landline phone numbers were pulsed to remove inactive numbers.

### The Netherlands

SSE provided landline and cell phone sample for the Netherlands. The RDD landline framework in the Netherlands is based on the national numbering plan provided by the Onafhankelijke Post en Telecommunicatie Autoriteit (OPTA). On the basis of the numbering plan, SSE utilized a probabilistic design for pulling “seed” blocks from which actual phone numbers were generated by adding a random three-digit number. The landline sample was stratified to ensure adequate representation of each of the 12 provinces. For the Netherlands, randomly generated landline numbers were also screened against business phone numbers and the Do-Not-Call register. For the mobile phone RDD sample, the numbering plan provided gives information about the prefixes of the various providers; however, it leaves up to six unknowns. The RDD sample was pulsed in order to achieve higher strike rates. The cell phone sample was also stratified based upon the provider distribution within the Netherlands. Using a standardized procedure, the landline and mobile RDD sample were pulsed in order to improve productivity.

### New Zealand

SSE provided landline and cell phone sample for New Zealand. Landline sample in New Zealand was based on the numbering plan provided by Telecom of New Zealand. The landline sample was stratified by New Zealand’s 16 regions. Number blocks are four-digits long throughout the country, so no adjustments to block-size are required. SSE utilizes electronic verification to filter out a large number of non-working numbers. Using a standardized procedure, the landline RDD sample was pulsed in order to improve productivity. Cell phone sampling in New Zealand was based on number blocks consisting of two- or three-digit exchanges (varying by cell phone provider). The SSE cell phone sample maintained an epsem approach by accounting for the effect of the differences in the size of the cell phone number-blocks.

### Norway

In Norway 65+ person based sample was drawn by Norstat using Bisnode. Approximately 95% of the population was covered by this sample. The 5% of the population that was not covered in the sample are comprised of people:

- With secret phone numbers<sup>1</sup>
- Who do not have some identifying information attached to their number (e.g., age, gender, region, etc.)
- Who have put themselves on a “no-call” list for marketing, surveys, and sales calls and/or elected to be excluded from the phone directory

Due to Norwegian legislation, Norstat does not have access to these numbers when conducting surveys. The sample is drawn proportionately so that a higher population density is associated with more numbers in the sampling base and a larger portion of the numbers in the drawn sample.

### Sweden

The sample frame consisted of the Swedish national registry of phone numbers, listed in the database Marknadsinformation AB. This registry contains all registered and active private phone numbers for approximately 87% of the adult 65+ population in Sweden; in total 1,693,953 individuals age 65 or older. The definition of ‘private’ corresponds to the number being registered using a Swedish personnummer (social security number) in contrast to

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<sup>1</sup> Approximately 0.25 % of the Norwegian population has a secret number



numbers registered using organisationsnummer (organizational registry code) which is used by businesses, institutions and government.

The stratification followed the same outline as was done in IHP 2014. In order to allow for geographical comparisons, the sample was stratified based on county councils. The sample was also stratified according to number type (landline/cell phone). This model corresponded to 42 strata.

The strata size was determined based on requirements for national geographical comparisons. For international comparisons only 2,400 interviews were necessary, but to be able to compare county councils the targeted number of interviews was set to 7,000. Larger samples were drawn for the three largest county councils. Within each stratum a simple random sample was drawn. Quotas were used to ensure the targeted number of interviews per strata.

### Switzerland

The sample source corresponded to data from the registry per the Federal Statistical Office (FSO). A principal and a reserve sample was provided; the reserve sample was only used to collect additional completes in Valais. All selected persons received an invitation letter to complete survey online or by telephone. Non-responders received up to two reminder letters.

Reminder telephone calls were also made for sample with an available telephone number. Out of the sample provided, 76% of the sample contained a telephone number.

### United Kingdom

SSE provided landline and cell phone sample for the UK using the number blocks provided by the Federal Office of Communications (OFCOM). SSE identified the different phone number blocks for each region and division within the UK. In order to obtain an epsem sample, a random-digit length (N=3) was used to generate the sample. For the mobile sample, SSE based its stratification on the numbering plan, which gives information about the prefixes of the various providers. Using a standardized procedure, the landline and mobile RDD samples were pulsed in order to improve productivity.

### United States

The sample used for the US portion of the study combined a dual-frame landline and cell phone RDD sample design. Utilizing a Marketing Systems Group (MSG) proprietary sample generation program, SSRS generated the sample for the US. MSG is not only one of the survey research industry's largest statistical sampling companies, but also the preferred supplier to social science researchers, and governmental organizations such as the US Census Bureau and the Centers for Disease Control. During generation, the RDD sample was prepared using MSG's proprietary GENESYS IDplus procedure, which not only limits sample to non-zero-banks, but also identifies and eliminates approximately 90% of all non-working and business numbers. Additionally, the entire sample was run against a database of known cell phone blocks (NPA-NXX-B) as well as those numbers ported from landline to wireless, whereupon identified cellphone numbers as part of the RDD landline frame were flagged in order not to be dialed.

The standard GENESYS RDD methodology produced a strict single-stage, epsem sample of residential telephone numbers. In other words, the GENESYS RDD sample ensured an equal and known probability of selection for every residential telephone number in the sample frame. GENESYS RDD samples achieve their statistical efficiency





through a structured database in combination with single-stage sampling procedures, which ensure geographic representativeness and increase the homogeneity within the implicit strata created by the GENESYS sampling procedures.

Following procedures similar to those used for the landline sample, SSRS generated a list of cell phone telephone numbers in random fashion. The cell phone sample was prepared using MSG's proprietary Cell-Wins procedure that screens out inactive cell phone numbers with an approximately 95% accuracy rate. This increases the productivity of cell phone sample for reasons identical to those mentioned above for landline IDplus.

While in the field, adjustments were made to the sample design in the US to more efficiently reach 65+ respondents on landline phones. We identified four groups in the landline sample by crossing the directory-listed numbers with consumer records in Neustar's Pure Consumer Premium database (formerly Targus): those with phone numbers listed in published telephone directories and identified as households with all residents aged 65 or older, those with at least one resident aged 65 and older, listed households with no one age 65 and older and those without information available for age. Based on the initial sample release, we saw disproportionately more completes coming from numbers where at least one person was "tagged" as being 65+. Using this information, subsequent sample releases oversampled households with at least one person tagged as being 65+. This procedure resulted in a minimal sampling-based design effect, addressed in the weighting procedures, while helping to improve sample efficiency.

### Household and Respondent Selection

For all of the countries except for Switzerland and Norway, the respondent, age 65 or older, was selected using a hybrid of the Westat selection method of respondent selection for the landline frame.<sup>2</sup> This within-household selection procedure reduces the bias created when the person responding to the survey is the one more likely to answer the phone or be present at the time of the call. Cell phones are considered individual devices rather than belonging to a household, and therefore the person answering the cell phone was the one who was interviewed. In Switzerland, respondents were targeted via the registry per the Federal Statistical Office (FSO). In Norway, 65+ respondents were targeted via the registry per Bisnode.

## DATA COLLECTION

In the fall and winter of 2016, the IHP 2017 questionnaire was developed and revised. Prior to the field period, the study was programmed into SSRS's Computer Assisted Telephone Interviewing (CATI) system. Each of the international partners administering interviews also programmed the survey into their respective interviewing software. In Switzerland, respondents were recruited via postal mail and invited to participate in an online or phone version of the survey; outbound reminder calls were made later in the field period to complete the phone survey (for sample with available phone numbers). All countries other than Switzerland employed a phone-only methodology. SSRS pretested the US version of the instrument in mid-January, 2017. Other-country pretests were conducted in February and March, 2017. Interviews were conducted between March 1 and June 16, 2017.

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<sup>2</sup> See Lavrakas (2010) for an extended description of the benefits of using this method to enhance the likelihood of achieving a representative within-household sample.





## Questionnaire Review, Translations and Cultural Adaptations

In the fall and winter of 2016, SSRS reviewed several iterations of the instrument developed by the Fund and its international partners and provided feedback about question wording, order, clarity, logic/programming, and other issues related to questionnaire quality.

Upon approval from The Commonwealth Fund research team, new and revised questions were translated into Canadian-French, Spanish, German, Dutch, French, Norwegian, Swedish, Swiss-Italian, Swiss-French and Swiss-German. SSRS's partner, Cetra translated the Canadian-French and Spanish instruments. EFG translated the instrument into French for France. GDCC translated the Dutch (Netherlands) and German (Germany) instruments. Norstat translated the instrument into Norwegian. M.I.S. Trend translated the Swiss-Italian, Swiss-German, and Swiss-French instruments. Indikator translated the Swedish instrument.

The translated documents were reviewed by the Fund's international partners for both new and previously translated questions to confirm that they were comprehensible, meaningful for respondents and comparable to the English-language versions of each question. Throughout the translation process, efforts were made to ensure that the question meaning of the translated questions would not deviate from the unified questionnaire or disrupt trend.

## Programming and Testing

Prior to the field period, the survey was programmed into SSRS's CATI system. Each of the international partners administering interviews also programmed the survey into their respective survey software. Extensive checking of the programs was conducted to assure that skip patterns followed the design of the questionnaire. The computer-assisted instruments were tested to ensure that all of the language inserts were working properly. Members of the SSRS team tested the US and Canadian versions of the instrument as well as the instruments fielded by EFG, GDCC and Norstat. The Swiss pretest version was reviewed by the SSRS team to ensure the web format met industry standards and that the program was working correctly. Each of the other-country survey providers also conducted extensive testing of their instruments.

Prior to the beginning of fieldwork random data were generated for USA and Canada to confirm that skip patterns were working correctly. At the beginning of the field period, SSRS requested preliminary SPSS files from each of the international partners to confirm that all skip instructions and variables were working as intended.

## Pretesting

In mid-January, SSRS pretested the survey in the US and provided a memo to the Fund with information about potential areas of confusion in the instrument/with specific questions, recommendations and observations related to new/highly-modified questions and questions asked in past IHP surveys, and areas of focus for future interviewer training. Following the US pretest, a few adjustments were made to the questionnaire and some interviewer notes were added for all countries.

In February and March, 2017, pretest interviews were conducted in all countries except Sweden. Table 2 provides a summary of the number of pretest interviews conducted in each country. The SSRS team reviewed pretest recordings for Canada (both English and French Canadian), the UK, Australia, and New Zealand. Pretest feedback was also provided by EFG, GDCC, Norstat, and M.I.S. Trend.



**TABLE 2: Summary of Pretest Interviews by Country**

	Pretest Conducted	Language(s) Pretest Conducted in	Dates Pretests Conducted	# of Pretests
Australia	Yes	English	2/22/17-2/28/17	10
Canada	Yes	English, French	2/15/17 (English) 2/24/17 (French)	10 English 5 French
France	Yes	French	3/1/17-3/6/17	10
Germany	Yes	German	2/22/17-2/27/17	11
New Zealand	Yes	English	2/22/17-2/28/17	10
Netherlands	Yes	Dutch	2/24/17-2/27/17	10
Norway	Yes	Norwegian	3/6/17-3/8/17	10
Sweden	No	--	--	--
Switzerland	Yes	German, French, Italian	2/28/17-3/1/17	5 Phone (3 German, 1 French, 1 Italian) 4 Web (3 German, 1 French)
United Kingdom	Yes	English	2/21/17-2/22/17	11
United States	Yes	English	1/11/17-1/12/17 and 2/2/17 <sup>3</sup>	25

SSRS provided memos to the Fund for each country pretest. These memos included observations about new/modified questions, feedback based on confusion related to some translations, recommendations for improvements to the instrument and areas of focus for future interviewer training.

A selection of the observations and changes made based on the pretest process is summarized below:

- Deleted questions/transitions (e.g., Q813)
- Reworded US insurance questions (e.g., Q1546 to Q1553)
- Adding a “Not applicable” response option to questions where respondents indicated the questions was not applicable to them (e.g., Q820, Q832)
- Adding interviewer notes to questions where additional clarification was needed (e.g., Q935)
- Minor wording edits to both new and existing questions (e.g., Q935, Q1406, Q1412, Q1429, Q1610)
- Minor translation edits to both new and existing questions<sup>4</sup>
- Insight into questions that may be nonstandard for some country respondents as the questions are less applicable/meaningful in that country
- Potentially problematic worded questions (e.g., Q1050)
- Identifying questions that are sensitive/too personal and may result in high non-response

A list of all changes made based on pretests completed in the US and other countries is available and can be provided upon request.

<sup>3</sup> A second pretest was conducted in the US to test some of the post-US pretest edits to the survey.

<sup>4</sup> Existing question translation modifications were only made if they were deemed necessary by the country partners.



## Completed Interviews

### Field Period

Interviews were conducted from March through May 2017 for the main sample and most oversample interviews. Interviews in Sweden were completed in June 2017. The field times varied by country and are specified in Table 3 below.

**TABLE 3: Field Period Per Country**

	Field Period
Australia	3/13/2017 - 5/10/2017
Canada	3/6/2017 - 5/16/2017
France	3/9/2017 - 5/11/2017
Germany	3/7/2017 - 5/9/2017
New Zealand	3/13/2017 - 5/8/2017
Netherlands	3/7/2017 - 5/13/2017
Norway	3/20/2017 - 5/11/2017
Sweden	3/13/2017 - 6/16/2017
Switzerland	3/15/2017 - 5/13/2017
United Kingdom	3/3/2017 - 5/12/2017
United States	3/6/2017 - 5/15/2017

### Survey Length and Language of Interview

Table 4 outlines the language/s and length of interview for each country in the 2017 IHP survey.

**TABLE 4: Language/s and Length of Interview per Country**

	Language(s)	Average length in minutes
Australia	English	21
Canada	English, French	22
France	French	23
Germany	German	21
New Zealand	English	23
Netherlands	Dutch	21
Norway	Norwegian	17
Sweden	Swedish	27
Switzerland	German, French, Italian	32 (phone), 31 (web)
United Kingdom	English	21
United States	English, Spanish	22

### Training Materials and Interviewer Training

Prior to the start of the study, interviewers received both written materials on the survey and formal training for conducting the survey. SSRS's project team and its international partners briefed and trained interviewers on the issues specific to the study, explaining the study's overall objectives, specific procedures, and questionnaire content. Similarly, Indikator and M.I.S. Trend managed the briefing and interviewer training in Sweden and Switzerland respectively.

The written materials provided and reviewed prior to the beginning of the field period included:

- An English-language annotated questionnaire with question by question instructions for interviewers.



- A list of frequently asked questions (FAQs) and the appropriate responses to those questions was provided. Additionally, the FAQs were tailored for items that were country-specific, namely the sponsoring organization and contact information.
- Information about the goals of the study, potential obstacles to be overcome in getting good answers to particular questions, and respondent problems that could be anticipated ahead of time as well as strategies for addressing them.

Interviewer training was conducted prior to the pretest and immediately before the survey was officially launched. Call center supervisors and interviewers were walked through each question in the questionnaire. Interviewers were given instructions to help them maximize response rates and ensure accurate data collection. They were instructed to encourage participation by emphasizing the importance of the project and to reassure respondents that the information they provided was confidential.

### Monitoring at EFG, GDCC and Norstat

In addition to the pre-launch briefings provided by the EFG and GDCC staff, members of the SSRS project team visited EFG and GDCC in order to provide direct oversight of the fieldwork process. EFG and GDCC carried detailed briefings at the start and during the field period. Training procedures included role-playing methodology – assuming interviewer and respondent roles -- in order to become comfortable with the CATI script. Supervisors conducted live monitoring and also reviewed a selection of recorded interviews. The supervisors also debriefed interviewers as a group and/or individually, as needed, during the fieldwork.

Similarly, Norstat briefed interviewers on all issues related to this study, including the introduction, probing, how to handle any misunderstandings, and ensuring that the instructions are being followed. Supervisors monitored fieldwork and provided feedback to the interviewers. Survey-specific issues were addressed as required, and an overall assessment of the interviewers' performance was made.

### SSRS Project Team Monitoring

The SSRS project teams monitored and listened to recordings of interviews in the US (English and Spanish), Canada (English), Australia and New Zealand throughout the field period and provided feedback, when necessary, to ensure that best practices were being followed. The SSRS team listened to a random selection of recordings in the UK. SSRS's partner, Cetra, reviewed recordings for Canada (Canadian French), France, Germany, the Netherlands, and Norway. Where necessary, the SSRS project team provided corrective feedback to interviewers and supervisors at SSRS and our fielding partners.

### Call Rule, Contact Attempts, Refusal Avoidance and Conversion Strategies

SSRS and each of the international partners carried out several strategies to maximize survey response by minimizing non-response and maximizing refusal conversion. The survey fielding enacted the following best-practice procedures.

#### USA and Canada

- The call rule was set to one initial call plus a maximum of nine callbacks.
- Sample was released in batches to ensure that it would be worked effectively.
- To increase the probability of completing an interview, a differential call rule was established that required that call attempts be initiated at different times of day and different days of the week.



- Power (assisted manual) dialing of all sample in Canada and landline sample in the US. All US cellphone sample was manually dialed as is required by law.
- Specially-trained interviewers were utilized to attempt refusal conversions, following a rest period of at least seven to ten days.
- Respondents were permitted to schedule call-back times.
- Interviews were completed in English and Spanish in the US.
- A Quebec-specific program was staffed with bilingual interviewers in order to accommodate the high incidence of French-speakers in Quebec and to complete interviews with French-language speakers in other provinces.

### Australia, New Zealand, and France

- Similar to the call rule procedure carried for the United States and Canada, a differential call rule was established in which call attempts were implemented at different times of day and different days of the week.
- The maximum was set at nine attempts with a rest period of one week after each interval of three call attempts.
- Sample was released in batches to ensure that it would be worked effectively.
- Refusals were called back after a two-week rest period.

### Germany, the Netherlands, and the United Kingdom

- Sample was released in batches to ensure that it would be worked effectively.
- A differential call rule was established in which call attempts were implemented at different times of day and different days of the week. The maximum was set at ten attempts.
- Refusals were called back after a seven-day rest period.

### Norway

- A differential call rule was employed in which times of the day and days of the week were varied, for a total of initial plus nine callbacks per frame (up to twenty call attempts if both a landline and cell phone number were associated with a sample piece)
- Sample was released in batches to ensure that it would be worked effectively.

### Sweden

- A differential call rule was established to ensure a good spread of call attempts within a week period as well as within times of day.
- Nine contact attempts were made to bolster a high response rate.
- To minimize refusals efficiently handling of scheduled callbacks was encouraged. Indikator abides by the ethical rules for conducting surveys outlined by the Swedish Ethical Council for Market Research, which do not permit making callbacks to respondents who indicate their unwillingness to participate in the survey.

### Switzerland

In Switzerland, respondents were recruited via postal mail and invited to participate in an online or phone version of the survey.

- In an effort to boost response rate, outbound calls (for sample with available phone numbers) were initiated approximately six weeks after the first mailing was sent to the full sample field.



**TABLE 5: Switzerland Contact Schedule**

Contact	Timing/Dates	Description
1	3/15/2017	First postal mailing to full sample, including: - A cover letter (describing the nature of the survey and its objectives) - A web link and unique passcode
2	3/29/2017	Second postal mailing to non-responder sample, including: - An endorsement letter - A web link and unique passcode
3	4/24/2017	Third postal mailing to non-responder sample without a phone number, including: - Final letter - A web link and unique passcode Outbound calling begins for non-responder sample with a phone number
4	5/1/2017	First postal mailing to oversample of Valais strata <sup>5</sup> , including: - A cover letter (describing the nature of the survey and its objectives) - A web link and unique passcode
5	5/13/2017	End of fieldwork

## Weekly Reports

Prior to the field, SSRS provided reporting data and disposition reporting templates to EFG, GDCC, Norstat, M.I.S. Trend, and Indikator. On a weekly basis, SSRS reviewed the status of data collection and provided feedback regarding the distribution of completes (e.g., in cases where the interviews were overly skewed toward older respondents), field progress by key demos, selected questionnaire questions, item non-response, and dispositions. Based on this feedback, SSRS was able to monitor sample productivity and provide guidance on how to best handle the sample available, when to load fresh sample, and thereby boost response rates.

## Bi-weekly and Periodic Updates

Throughout the field period, SSRS provided the Fund with bi-weekly updates with key information tracking overall progress in each country. These reports, designed to provide snapshot information of key variables of interest, included tables for completes per sample type by gender, age, region, and language of interview (where relevant) as well as a few key questions the Fund selected prior to field launch. Along with the bi-weekly data reports, SSRS provided a narrative regarding field progress and reported on any field-related concerns.

In early May, SSRS provided each international partner with an interim status update on data collection, including an up-to-date distribution of interviews by gender, age, region, and language of interview.

## Final Counts

Tables 6 to 18 below show final counts per country by gender, age, region, and language of interview, where relevant.

<sup>5</sup> A small additional sample release was needed to get the number of needed completes in Valais.



**TABLE 6: Final Counts Australia – Main Sample**

GENDER / AGE	LANDLINE	Gender / Age (%)	Landline (%)	CELL-PHONE	Gender / Age (%)	Cellphone (%)	TOTAL	Gender / Age (%)
Male Age 65-69	74	19%	69%	33	33%	31%	107	21%
Male Age 70-74	49	12%	84%	9	9%	16%	58	12%
Male Age 75+	66	17%	92%	6	6%	8%	72	14%
<b>Male Total</b>	<b>189</b>	<b>47%</b>	<b>80%</b>	<b>48</b>	<b>48%</b>	<b>20%</b>	<b>237</b>	<b>47%</b>
Female Age 65-69	67	17%	75%	22	22%	25%	89	18%
Female Age 70-74	63	16%	78%	18	18%	22%	81	16%
Female Age 75+	81	20%	87%	12	12%	13%	93	19%
<b>Female Total</b>	<b>211</b>	<b>53%</b>	<b>80%</b>	<b>52</b>	<b>52%</b>	<b>20%</b>	<b>263</b>	<b>53%</b>
Refused Age/Refused or Other Gender	0	0%		0	0%		0	0%
<b>TOTAL</b>	<b>400</b>		<b>80%</b>	<b>100</b>		<b>20%</b>	<b>500</b>	

Urban Status	LANDLINE	Region (%)	Landline (%)	CELLPHONE	Region (%)	Cellphone (%)	TOTAL	Region (%)
Major City	243	61%	100%	0	0%	0%	243	49%
Not Major City	157	39%	100%	0	0%	0%	157	31%
Not available	0	0%	0%	100	100%	100%	100	20%
<b>TOTAL</b>	<b>400</b>		<b>80%</b>	<b>100</b>		<b>20%</b>	<b>500</b>	<b>100%</b>





**TABLE 6: Final Counts Australia – Main Sample cont'd**

REGION	LANDLINE	Region (%)	Landline (%)	CELLPHONE	Region (%)	Cellphone (%)	TOTAL	Region (%)
NSW	148	37%	85%	27	27%	15%	175	35%
Victoria	94	24%	77%	28	28%	23%	122	24%
Queensland	78	20%	77%	23	23%	23%	101	20%
Western Australia	33	8%	83%	7	7%	18%	40	8%
South Australia	28	7%	74%	10	10%	26%	38	8%
Tasmania	15	4%	79%	4	4%	21%	19	4%
Australian Capital Territory	2	1%	67%	1	1%	33%	3	1%
Northern Territory	2	1%	100%	0	0%	0%	2	0%
<b>TOTAL</b>	<b>400</b>		<b>80%</b>	<b>100</b>		<b>20%</b>	<b>500</b>	<b>100%</b>

NSW Data-Based Variable	LANDLINE	Region (%)	Landline (%)	CELLPHONE	Region (%)	Cellphone (%)	TOTAL	Region (%)
NSW	148	37%	85%	27	27%	15%	175	35%
Victoria	94	24%	77%	28	28%	23%	122	24%
NOT NSW or Victoria	158	40%	78%	45	45%	22%	203	41%
<b>TOTAL</b>	<b>400</b>		<b>80%</b>	<b>100</b>		<b>20%</b>	<b>500</b>	<b>100%</b>

**TABLE 7: Final Counts Australia – New South Wales Oversample**

GENDER / AGE	LANDLINE	Gender / Age (%)	Landline (%)	CELL-PHONE	Gender / Age (%)	Cellphone (%)	TOTAL	Gender / Age (%)
Male Age 65-69	147	18%	75%	50	25%	25%	197	20%
Male Age 70-74	91	11%	77%	27	14%	23%	118	12%
Male Age 75+	122	15%	88%	17	9%	12%	139	14%
<b>Male Total</b>	<b>360</b>	<b>45%</b>	<b>79%</b>	<b>94</b>	<b>47%</b>	<b>21%</b>	<b>454</b>	<b>45%</b>
Female Age 65-69	166	21%	73%	60	30%	27%	226	23%
Female Age 70-74	105	13%	77%	32	16%	23%	137	14%
Female Age 75+	169	21%	92%	14	7%	8%	183	18%
<b>Female Total</b>	<b>440</b>	<b>55%</b>	<b>81%</b>	<b>106</b>	<b>53%</b>	<b>19%</b>	<b>546</b>	<b>55%</b>
Refused Age/Refused or Other Gender	0	0%	0%	0	0%	0%	0	0%
<b>TOTAL</b>	<b>800</b>		<b>80%</b>	<b>200</b>		<b>20%</b>	<b>1000</b>	<b>100%</b>

**TABLE 8: Final Counts Australia – Victoria Oversample**

GENDER / AGE	LANDLINE	Gender / Age (%)	Landline (%)	CELL-PHONE	Gender / Age (%)	Cellphone (%)	TOTAL	Gender / Age (%)
Male Age 65-69	148	19%	81%	35	18%	19%	183	18%
Male Age 70-74	111	14%	82%	24	12%	18%	135	14%
Male Age 75+	120	15%	85%	21	11%	15%	141	14%
<b>Male Total</b>	<b>379</b>	<b>47%</b>	<b>83%</b>	<b>80</b>	<b>40%</b>	<b>17%</b>	<b>459</b>	<b>46%</b>
Female Age 65-69	142	18%	68%	68	34%	32%	210	21%
Female Age 70-74	119	15%	81%	28	14%	19%	147	15%
Female Age 75+	160	20%	87%	24	12%	13%	184	18%
<b>Female Total</b>	<b>421</b>	<b>53%</b>	<b>78%</b>	<b>120</b>	<b>60%</b>	<b>22%</b>	<b>541</b>	<b>54%</b>
Refused Age/Refused or Other Gender	0	0%	0%	0	0%	0%	0	0%
<b>TOTAL</b>	<b>800</b>		<b>80%</b>	<b>200</b>		<b>20%</b>	<b>1000</b>	<b>100%</b>



**TABLE 8: Final Counts Australia – Victoria Oversample Cont'd**

REGION	LANDLINE	Region (%)	Landline (%)	CELLPHONE	Region (%)	Cellphone (%)	TOTAL	Region (%)
Lodden Mallee (Rural)	47	6%	82%	10	5%	18%	57	6%
Barwon-South Western (Rural)	87	11%	82%	19	10%	18%	106	11%
Hume (Rural)	43	5%	84%	8	4%	16%	51	5%
Grampians (Rural)	41	5%	79%	11	6%	21%	52	5%
Gippsland (Rural)	56	7%	80%	14	7%	20%	70	7%
North & West Metropolitan (Urban)	188	24%	72%	74	37%	28%	262	26%
Southern Metropolitan (Urban)	181	23%	84%	34	17%	16%	215	22%
Eastern Metropolitan (Urban)	157	20%	84%	30	15%	16%	187	19%
<b>TOTAL VICTORIA</b>	<b>800</b>	<b>100%</b>	<b>80%</b>	<b>200</b>	<b>100%</b>	<b>20%</b>	<b>1,000</b>	<b>100%</b>

**TABLE 9: Final Counts Canada**

GENDER / AGE	LANDLINE	Gender / Age (%)
Male Age 65-69	534	12%
Male Age 70-74	476	10%
Male Age 75+	655	14%
<b>Male Total</b>	<b>1665</b>	<b>37%</b>
Female Age 65-69	787	17%
Female Age 70-74	723	16%
Female Age 75+	1333	29%
<b>Female Total</b>	<b>2843</b>	<b>62%</b>
Refused Age/Refused or Other Gender	41	1%
<b>TOTAL</b>	<b>4549</b>	<b>100%</b>

LANGUAGE	LANDLINE	Language (%)
English	3598	79%
French	951	21%
<b>TOTAL</b>	<b>4549</b>	<b>100%</b>

REGION	LANDLINE	Region (%)
Newfoundland and Labrador	254	6%
Prince Edward Island	253	6%
Nova Scotia	259	6%
New Brunswick	273	6%
Quebec	1002	22%
Ontario	1504	33%
Manitoba	250	5%
Saskatchewan	251	6%
Alberta	250	5%
British Columbia	250	5%
Yukon	3	0%
Northwest Territories	0	0%
Nunavut	0	0%
<b>TOTAL</b>	<b>4549</b>	<b>100%</b>



**TABLE 10: Final Counts France**

GENDER / AGE	LANDLINE	Gender / Age (%)
Male Age 65-69	131	17%
Male Age 70-74	80	11%
Male Age 75+	122	16%
Male Total	333	44%
Female Age 65-69	139	19%
Female Age 70-74	95	13%
Female Age 75+	183	24%
Female Total	417	56%
Refused Age/Refused or Other Gender	0	0%
<b>TOTAL</b>	<b>750</b>	<b>100%</b>

REGION	LANDLINE	Region (%)
Grand Est	62	8%
Nouvelle Aquitaine	78	10%
Auvergne-Rhône-Alpes	81	11%
Bourgogne, Franche-Comté	38	5%
Bretagne	40	5%
Centre-Val de Loire	23	3%
Corse	4	1%
Île-de-France	118	16%
Occitanie	76	10%
Hauts-de France	75	10%
Normandie	42	6%
Pays de la Loire	45	6%
Provence-Alpes, Côte-d'Azur	68	9%
<b>TOTAL</b>	<b>750</b>	<b>100%</b>

FRANCE UDA	LANDLINE	Region (%)
IDF	118	16%
Bassin Parisien OUEST	65	9%
Bassin Parisien EST	60	8%
Nord	53	7%
Ouest	111	15%
Est	62	8%
Sud Ouest	94	13%
Sud Est	81	11%
Méditerranée	106	14%
<b>TOTAL</b>	<b>750</b>	<b>100%</b>



**TABLE 11: Final Counts Germany**

GENDER / AGE	LANDLINE	Gender / Age (%)
Male Age 65-69	104	14%
Male Age 70-74	54	7%
Male Age 75+	160	21%
<b>Male Total</b>	<b>318</b>	<b>42%</b>
Female Age 65-69	91	12%
Female Age 70-74	81	11%
Female Age 75+	255	34%
<b>Female Total</b>	<b>427</b>	<b>57%</b>
Refused Age/Refused or Other Gender	6	1%
<b>TOTAL</b>	<b>751</b>	<b>99%</b>

REGION	LANDLINE	Region (%)
Schleswig-Holstein	38	5%
Hamburg	22	3%
Bremen	7	1%
Niedersachsen	72	10%
Nordrhein-Westfalen	123	16%
Rheinland-Pfalz	27	4%
Saarland	8	1%
Hessen	53	7%
Baden-Württemberg	88	12%
Bayern	126	17%
Berlin	47	6%
Mecklenburg- Vorpommern	15	2%
Brandenburg	25	3%
Sachsen-Anhalt	35	5%
Thüringen	25	3%
Sachsen	40	5%
<b>TOTAL</b>	<b>751</b>	<b>100%</b>



**TABLE 12: Final Counts Netherlands**

GENDER / AGE	LANDLINE	Gender / Age (%)	Landline (%)	CELL-PHONE	Gender / Age (%)	Cellphone (%)	TOTAL	Gender / Age (%)
Male Age 65-69	112	17%	78%	31	41%	22%	143	19%
Male Age 70-74	78	12%	84%	15	20%	16%	93	12%
Male Age 75+	101	15%	89%	13	17%	11%	114	15%
Male Total	291	43%	83%	59	79%	17%	350	47%
Female Age 65-69	81	12%	92%	7	9%	8%	88	12%
Female Age 70-74	99	15%	94%	6	8%	6%	105	14%
Female Age 75+	204	30%	99%	3	4%	1%	207	28%
Female Total	384	57%	96%	16	21%	4%	400	53%
Refused Age/Refused or Other Gender	0	0%	0%	0	0%	0%	0	0%
<b>TOTAL</b>	<b>675</b>		<b>90%</b>	<b>75</b>		<b>10%</b>	<b>750</b>	

REGION	LANDLINE	Region (%)	Landline (%)	CELLPHONE	Region (%)	Cellphone (%)	TOTAL	Region (%)
Drenthe	22	3%	96%	1	1%	4%	23	3%
Flevoland	8	1%	80%	2	3%	20%	10	1%
Friesland	40	6%	89%	5	7%	11%	45	6%
Gelderland	90	13%	87%	13	17%	13%	103	14%
Groningen	20	3%	87%	3	4%	13%	23	3%
Limburg	46	7%	85%	8	11%	15%	54	7%
Noord-Brabant	98	15%	87%	15	20%	13%	113	15%
Noord-Holland	120	18%	94%	8	11%	6%	128	17%
Overijssel	43	6%	96%	2	3%	4%	45	6%
Utrecht	52	8%	96%	2	3%	4%	54	7%
Zeeland	24	4%	92%	2	3%	8%	26	3%
Zuid-Holland	112	17%	89%	14	19%	11%	126	17%
Refused	0	0%	0%	0	0%	0%	0	0%
<b>TOTAL</b>	<b>675</b>	<b>100%</b>	<b>90%</b>	<b>75</b>	<b>100%</b>	<b>10%</b>	<b>750</b>	<b>100%</b>

**TABLE 13: Final Counts New Zealand**

GENDER / AGE	LANDLINE	Gender / Age (%)	Landline (%)	CELL-PHONE	Gender / Age (%)	Cellphone (%)	TOTAL	Gender / Age (%)
Male Age 65-69	78	20%	68%	36	36%	32%	114	23%
Male Age 70-74	35	9%	71%	14	14%	29%	49	10%
Male Age 75+	55	14%	90%	6	6%	10%	61	12%
Male Total	168	42%	75%	56	56%	25%	224	45%
Female Age 65-69	92	23%	79%	25	25%	21%	117	23%
Female Age 70-74	55	14%	81%	13	13%	19%	68	14%
Female Age 75+	85	21%	93%	6	6%	7%	91	18%
Female Total	232	58%	84%	44	44%	16%	276	55%
Refused Age/Refused or Other Gender	0	0%	0%	0	0%	0%	0	0%
<b>TOTAL</b>	<b>400</b>		<b>80%</b>	<b>100</b>		<b>20%</b>	<b>500</b>	

REGION	LANDLINE	Region (%)	Landline (%)	CELLPHONE	Region (%)	Cellphone (%)	TOTAL	Region (%)
Auckland	83	21%	70%	35	35%	30%	118	24%
North	147	37%	84%	27	27%	16%	174	35%
Central	74	19%	87%	11	11%	13%	85	17%
South	96	24%	83%	20	20%	17%	116	23%
Don't know / Refused	0	0%	0%	7	7%	100%	7	1%
<b>TOTAL</b>	<b>400</b>	<b>100%</b>	<b>80%</b>	<b>100</b>	<b>100%</b>	<b>20%</b>	<b>500</b>	<b>100%</b>



**TABLE 14: Final Counts Norway**

GENDER / AGE	LANDLINE	Gender / Age (%)	Landline (%)	CELLPHONE	Gender / Age (%)	Cellphone (%)	TOTAL	Gender / Age (%)
Male Age 65-69	3	8%	3%	112	16%	97%	115	15%
Male Age 70-74	9	23%	7%	115	16%	93%	124	17%
Male Age 75+	18	45%	14%	107	15%	86%	125	17%
Male Total	30	75%	8%	334	47%	92%	364	49%
Female Age 65-69	2	5%	2%	120	17%	98%	122	16%
Female Age 70-74	5	13%	4%	107	15%	96%	112	15%
Female Age 75+	3	8%	2%	149	21%	98%	152	20%
Female Total	10	25%	3%	376	53%	97%	386	51%
Refused Age/Refused or Other Gender	0	0%	0%	0	0%	0%	0	0%
<b>TOTAL</b>	<b>40</b>		<b>5%</b>	<b>710</b>		<b>95%</b>	<b>750</b>	

REGION	LANDLINE	Region (%)	Landline (%)	CELLPHONE	Region (%)	Cellphone (%)	TOTAL	Region (%)
Østfold	4	10%	9%	47	7%	91%	51	7%
Akershus	7	18%	8%	81	11%	92%	88	12%
Oslo	5	13%	7%	67	9%	93%	72	10%
Hedmark	3	8%	9%	32	5%	91%	35	5%
Oppland	2	5%	6%	34	5%	94%	36	5%
Buskerud	1	3%	3%	41	6%	98%	42	6%
Vestfold	1	3%	3%	32	5%	97%	33	4%
Telemark	0	0%	0%	30	4%	100%	30	4%
Aust-Agder	0	0%	0%	17	2%	100%	17	2%
Vest-Agder	2	5%	6%	32	5%	94%	34	5%
Rogaland	3	8%	5%	57	8%	95%	60	8%
Hordaland	5	13%	8%	56	8%	92%	61	8%
Sogn og Fjordane	0	0%	0%	22	3%	100%	22	3%
Møre og Romsdal	3	8%	8%	35	5%	92%	38	5%
Sør-Trøndelag	0	0%	0%	45	6%	100%	45	6%
Nord-Trøndelag	0	0%	0%	19	3%	100%	19	3%
Nordland	0	0%	0%	35	5%	100%	35	5%
Troms	4	10%	18%	19	3%	82%	23	3%
Finnmark-Finnmárku	0	0%	0%	9	1%	100%	9	1%
<b>TOTAL</b>	<b>40</b>	<b>100%</b>	<b>5%</b>	<b>710</b>	<b>100%</b>	<b>95%</b>	<b>750</b>	<b>100%</b>



**TABLE 15: Final Counts Sweden**

GENDER / AGE	LANDLINE	Gender / Age (%)	Landline (%)	CELL-PHONE	Gender / Age (%)	Cellphone (%)	TOTAL	Gender / Age (%)
Male Age 65-69	282	8%	42%	401	11%	58%	683	10%
Male Age 70-74	326	9%	36%	583	17%	64%	909	13%
Male Age 75+	658	19%	49%	699	19%	51%	1357	19%
Male Total	1266	36%	43%	1683	48%	57%	2949	42%
Female Age 65-69	341	10%	41%	505	14%	59%	846	12%
Female Age 70-74	547	16%	47%	617	18%	53%	1164	17%
Female Age 75+	1344	38%	66%	692	20%	34%	2036	29%
Female Total	2232	64%	55%	1814	52%	45%	4046	58%
Refused Age/Refused or Other Gender	2	0%	40%	3	0%	60%	5	0%
<b>TOTAL</b>	<b>3500</b>		<b>50%</b>	<b>3500</b>		<b>50%</b>	<b>7000</b>	

REGION	LANDLINE	Region (%)	Landline (%)	CELLPHONE	Region (%)	Cellphone (%)	TOTAL	Region (%)
Stockholm	300	9%	50%	300	9%	50%	600	9%
Uppsala	150	4%	48%	150	5%	52%	300	4%
Södermanland	150	4%	51%	150	4%	49%	300	4%
Östergötland	150	4%	49%	150	5%	51%	300	4%
Jönköping	150	5%	52%	150	4%	48%	300	5%
Kronoberg	150	4%	51%	150	4%	49%	300	4%
Kalmar	150	4%	48%	150	4%	52%	300	4%
Gotland	100	3%	52%	100	3%	48%	200	3%
Blekinge	150	4%	52%	150	4%	48%	300	4%
Skåne	275	8%	50%	275	8%	50%	550	8%
Halland	150	5%	51%	150	5%	49%	300	5%
Västra Götaland	275	9%	50%	275	9%	50%	550	9%
Värmland	150	4%	50%	150	4%	50%	300	4%
Örebro	150	5%	53%	150	4%	47%	300	4%
Västmanland	150	4%	54%	150	4%	46%	300	4%
Dalarna	150	4%	47%	150	4%	53%	300	4%
Gävleborg	150	4%	50%	150	4%	50%	300	4%
Västernorrland	150	4%	54%	150	4%	46%	300	4%
Jämtland	150	4%	49%	150	4%	51%	300	4%
Västerbotten	150	4%	49%	150	4%	51%	300	4%
Norrbottn	150	4%	52%	150	3%	48%	300	3%
Other	0	0%	0%	0	0%	0%	0	0%
Refused	0	0%	0%	0	0%	0%	0	0%
<b>TOTAL</b>	<b>3500</b>	<b>100%</b>	<b>50%</b>	<b>3500</b>	<b>100%</b>	<b>50%</b>	<b>7000</b>	<b>100%</b>





**TABLE 16: Final Counts Switzerland**

GENDER / AGE	PHONE	Gender / Age (%)	Phone (%)	WEB	Gender / Age (%)	Web (%)	TOTAL	Gender / Age (%)
Male Age 65-69	69	6%	17%	330	16%	83%	399	12%
Male Age 70-74	98	9%	21%	369	18%	79%	467	14%
Male Age 75+	271	24%	41%	389	19%	59%	660	20%
Male Total	438	38%	29%	1088	52%	71%	1526	47%
Female Age 65-69	127	11%	30%	302	15%	70%	429	13%
Female Age 70-74	176	15%	36%	311	15%	64%	487	15%
Female Age 75+	414	36%	51%	382	18%	49%	796	25%
Female Total	717	62%	41%	995	48%	59%	1712	53%
Refused Age/Refused or Other Gender	0	0%	0%	0	0%	0%	0	0%
<b>TOTAL</b>	<b>1155</b>		<b>35%</b>	<b>2083</b>		<b>65%</b>	<b>3238</b>	

LANGUAGE	PHONE	Language (%)	Phone (%)	WEB	Language (%)	Web (%)	TOTAL	Language (%)
German	419	36%	40%	620	30%	60%	1040	32%
French	595	52%	32%	1274	61%	68%	1869	58%
Italian	140	12%	44%	189	9%	56%	329	10%
<b>TOTAL</b>	<b>1155</b>	<b>100%</b>	<b>36%</b>	<b>2083</b>	<b>100%</b>	<b>64%</b>	<b>3238</b>	<b>100%</b>

REGION	PHONE	Region (%)	Phone (%)	WEB	Region (%)	Web (%)	TOTAL	Region (%)
Zurich	104	9%	31%	228	11%	69%	332	10%
Bern	91	8%	48%	97	5%	52%	188	6%
Luzern	23	2%	39%	36	2%	61%	59	2%
Uri	0	0%	0%	3	0%	100%	3	0%
Schwyz	11	1%	50%	11	1%	50%	22	1%
Obwalden	2	0%	50%	1	0%	50%	3	0%
Nidwalden	1	0%	17%	5	0%	83%	6	0%
Glarus	3	0%	60%	2	0%	40%	5	0%
Zug	5	0%	25%	15	1%	75%	20	1%
Fribourg	13	1%	27%	36	2%	73%	49	2%
Solothurn	16	1%	53%	14	1%	47%	30	1%
Basel-Stadt	13	1%	48%	14	1%	52%	27	1%
Basel-Landschaft	19	2%	43%	25	1%	57%	44	1%
Schaffhausen	1	0%	13%	7	0%	88%	8	0%
Appenzell Ausserrhoden	3	0%	38%	5	0%	63%	8	0%
Appenzell Innerrhoden	1	0%	100%	0	0%	0%	1	0%
St. Gallen	25	2%	45%	30	1%	55%	55	2%
Graubunden	14	1%	33%	29	1%	67%	43	1%
Aargau	34	3%	35%	62	3%	65%	96	3%
Thurgau	11	1%	38%	18	1%	62%	29	1%
Ticino	135	12%	43%	177	9%	57%	312	10%
Vaud	124	11%	38%	200	10%	62%	324	10%
Valais	149	13%	46%	172	8%	54%	321	10%
Neuchatel	27	2%	40%	39	2%	60%	66	2%
Geneva	320	28%	28%	840	40%	72%	1160	36%
Jura	10	1%	37%	17	1%	63%	27	1%
<b>TOTAL</b>	<b>1155</b>	<b>100%</b>	<b>36%</b>	<b>2083</b>	<b>100%</b>	<b>64%</b>	<b>3238</b>	<b>100%</b>



**TABLE 17: Final Counts United Kingdom**

GENDER / AGE	LANDLINE	Gender / Age (%)	Landline (%)	CELL-PHONE	Gender / Age (%)	Cellphone (%)	TOTAL	Gender / Age (%)
Male Age 65-69	65	9%	86%	11	22%	14%	76	10%
Male Age 70-74	67	10%	88%	9	18%	12%	76	10%
Male Age 75+	125	18%	95%	6	12%	5%	131	17%
Male Total	257	37%	91%	26	52%	9%	283	38%
Female Age 65-69	108	15%	92%	9	18%	8%	117	16%
Female Age 70-74	113	16%	91%	11	22%	9%	124	16%
Female Age 75+	217	31%	99%	3	6%	1%	220	29%
Female Total	438	62%	95%	23	46%	5%	459	61%
Refused Age/Refused or Other Gender	8	1%	89%	1	2%	11%	9	1%
<b>TOTAL</b>	<b>703</b>		<b>93%</b>	<b>50</b>		<b>7%</b>	<b>753</b>	

REGION	LANDLINE	Region (%)	Landline (%)	CELLPHONE	Region (%)	Cellphone (%)	TOTAL	Region (%)
Northeast	56	8%	93%	4	8%	7%	60	8%
Yorks & Humber	38	5%	95%	2	4%	5%	40	5%
East Midlands	62	9%	93%	5	10%	7%	67	9%
Eastern	22	3%	88%	3	6%	12%	25	3%
London	70	10%	96%	3	6%	4%	73	10%
South East	143	20%	93%	10	20%	7%	153	20%
South West	85	12%	97%	3	6%	3%	88	12%
West Midlands	46	6%	90%	5	10%	10%	51	7%
North West	81	12%	95%	4	8%	5%	85	11%
Wales	31	4%	89%	4	8%	11%	35	5%
Scotland	56	8%	92%	5	10%	8%	61	8%
Northern Ireland	13	2%	93%	1	2%	7%	14	2%
Refused	0	0%	0%	1	2%	100%	1	0%
<b>TOTAL</b>	<b>703</b>	<b>100%</b>	<b>93%</b>	<b>50</b>	<b>100%</b>	<b>7%</b>	<b>753</b>	<b>100%</b>

**TABLE 18: Final Counts United States**

GENDER / AGE	LANDLINE	Gender / Age (%)	Landline (%)	CELLPHONE	Gender / Age (%)	Cellphone (%)	TOTAL	Gender / Age (%)
Male Age 65-69	86	8%	66%	45	16%	34%	131	9%
Male Age 70-74	103	9%	71%	42	15%	29%	145	10%
Male Age 75+	204	18%	80%	50	18%	20%	254	18%
Male Total	393	35%	74%	137	50%	26%	530	38%
Female Age 65-69	131	12%	74%	45	16%	26%	176	13%
Female Age 70-74	168	15%	82%	38	14%	18%	206	15%
Female Age 75+	400	36%	89%	51	18%	11%	451	32%
Female Total	699	63%	84%	134	49%	16%	833	60%
Refused Age/Refused or Other Gender	24	2%	83%	5	2%	17%	29	2%
<b>TOTAL</b>	<b>1116</b>		<b>80%</b>	<b>276</b>		<b>20%</b>	<b>1392</b>	

LANGUAGE	LANDLINE	Language (%)	Landline (%)	CELLPHONE	Language (%)	Cellphone (%)	TOTAL	Language (%)
English	1110	99%	81%	268	97%	19%	1378	99%
Spanish	6	1%	43%	8	3%	57%	14	1%
<b>TOTAL</b>	<b>1116</b>		<b>80%</b>	<b>276</b>		<b>20%</b>	<b>1392</b>	



**TABLE 18: Final Counts United States Cont'd**

REGION	LANDLINE	Region (%)	Landline (%)	CELLPHONE	Region (%)	Cellphone (%)	TOTAL	Region (%)
North East	221	20%	86%	36	13%	14%	257	18%
North Central	281	25%	81%	64	23%	19%	345	25%
South	391	35%	77%	116	42%	23%	507	36%
West	223	20%	79%	60	22%	21%	283	20%
<b>TOTAL</b>	<b>1116</b>		<b>80%</b>	<b>276</b>		<b>20%</b>	<b>1392</b>	

## Data Processing and Integration

In order to facilitate an efficient data integration process across countries, SSRS developed a standardized data map to be utilized by all the international partners when structuring their data in ASCII format. Once the integrated data were compiled, an independent checking of all variables was carried out to ensure that all variables were accurately constructed. Raw data were also run against clean data and reviewed as a further verification of valid codes and skip patterns. Country-specific data processing procedures carried out by SSRS and each of the international partners are described below. As described in the Data Memo provided to all partners in August, 2017, additional quality control checks were performed on the final data, as needed. The memo included a description of checks for internal data consistency, trending, and modal differences (for Switzerland).

### USA and Canada

Data file preparation began soon after the study entered the field. Data were checked using multiple methods including a “data cleaning” procedure in which data processors recreated CATI skips pattern instructions in order to ensure that all variables were created correctly and had the appropriate number of cases. This procedure involved a check of raw data by a program that consisted of instructions derived from the skip patterns designated on the questionnaire. The program confirmed that data were consistent with the definitions of codes and ranges and matched the appropriate bases of all questions. In addition, the project director conducted an independent check to confirm that all variables were created correctly, had the correct number of cases, and were coded according to specifications. Lastly, raw data were run against clean data and reviewed as a further verification of valid codes and skip patterns.

### Australia, New Zealand, and France

An interim data check of the skip pattern and filter logics was performed at 10%, 50% and 100% of the completed interviews by EFG’s research team. These data were also checked by SSRS’s back-end data processor and the SSRS team using the generated ASCII data file created according to the data map and the data cleaning and quality check procedure described above.

### Germany, the Netherlands, and the United Kingdom

Data checks of the skip pattern and filter logics were performed with every data delivery (e.g., RDG, pretest, first night, interim and final). These data were also checked by SSRS’s back-end data processor and the SSRS team using the generated ASCII data file created according to the data map and the data cleaning and quality check procedure described above.

### Norway

The survey programming was implemented by a senior programmer with over ten years of experience at Norstat. The CATI programming was further checked by a project manager and a field manager. Finally, a senior



programmer checked all of the SPSS variables. These data were also checked by SSRS's back-end data processor and the SSRS team using the generated ASCII data file created according to the data map and the data cleaning and quality check procedure described above.

### Sweden

The data processing procedure was outlined and tested in with preliminary data in April. After feedback from SSRS regarding the output format of the ASCII-file the procedure was updated and finalized. When the field period was closed all remaining data were checked. The following procedures were performed:

- Cleaning of the variables from the CATI-system, server and registry
- Removal of personally identifiable information (PII) variables (Q655, Q710, Q710a, Q715)
- The following variables were included: Q600, Q600a, Q630, Q742, Q743, Q750
- Calculation of interview length based on time stamps
- Independent control in SPSS and Excel for the created variables
- ASCII-conversion of the data-file

These data were also checked by SSRS's back-end data processor and the SSRS team using the generated ASCII data file created according to the data map and the data cleaning and quality check procedure described above.

### Switzerland

Data control checks by the project manager were carried out on preliminary and final data by M.I.S. Trend.

These data were also checked by SSRS's back-end data processor and the SSRS team using the generated ASCII data file created according to the data map and the data cleaning and quality check procedure described above.

## RESPONSE RATES

The response rates for this study (shown in Tables 19-23 below) were calculated using AAPOR's RR3. The detailed summary table for Switzerland is shown at the end of this section as Switzerland used an address/registry based design.

**TABLE 19: Response Rates by Country by Frame**

	Landline	Cell Phone	Total
Australia	28%	13%	25%
Canada	23%	--	23%
France	24%	--	24%
Germany	19%	--	19%
Netherlands	51%	59%	52%
New Zealand	24%	37%	26%
Norway	--	--	15%
Sweden	30%	28%	29%
Switzerland	--	--	45%
United Kingdom	23%	9%	22%
United States	19%	20%	19%



**TABLE 20: Landline Response Rates by Country**

Eligible, Interview (Category 1)	Australia	Canada	France	Germany	Netherlands
Complete	2000	4549	750	751	675
Eligible, non-interview (Category 2)					
Refusal and breakoff	165	21349	36	297	93
Break off	4	2697	4	26	8
Answering machine	25	3070	9	124	25
Physically or mentally unable/incompetent	25	1692	7	33	28
Deleted interview	0	1508	16	16	0
Language Problem	0	2	0	0	0
Unknown eligibility, non-interview (Category 3)					
Always busy	2918	1282	197	0	0
No answer	4829	17428	6793	2509	1346
Answering machine-don't know if household	7095	5244	4102	5261	261
Call blocking	0	282	0	6	0
Housing unit, unknown if eligible respondent	4005	2561	1440	3503	662
No screener completed	101	155	57	429	63
Not eligible (Category 4)					
Fax/data line	563	2585	227	482	201
Non-working number	1927	33632	106	577	688
Business, government office, other organizations	1598	3603	771	704	797
No eligible respondent	4645	10195	1601	2672	2314
Quota filled	0	0	0	0	0
Total phone numbers used	29900	111834	16116	17390	7161
Response Rate 3	28.4%	23.2%	23.5%	19.0%	51.4%



**TABLE 20: Landline Response Rates by Country Cont'd**

Eligible, Interview (Category 1)	New Zealand	Norway	Sweden	United Kingdom	United States
Complete	400	--	3500	703	1116
<b>Eligible, non-interview (Category 2)</b>					
Refusal and breakoff	19	--	5137	355	4156
Break off	2	--	2147	12	1209
Answering machine	7	--	211	108	1384
Physically or mentally unable/incompetent	7	--	645	10	154
Deleted interview	0	--	0	0	3
Language Problem	0	--	0	0	204
<b>Unknown eligibility, non-interview (Category 3)</b>					
Always busy	203	--	0	0	2009
No answer	2996	--	0	4825	14586
Answering machine-don't know if household	2176	--	0	2786	3190
Call blocking	0	--	0	21	76
Housing unit, unknown if eligible respondent	1358	--	0	2813	566
No screener completed	15	--	0	349	184
<b>Not eligible (Category 4)</b>					
Fax/data line	212	--	0	505	2347
Non-working number	1801	--	698	1417	126804
Business, government office, other organizations	955	--	0	1124	1758
No eligible respondent	949	--	26	2459	1251
Quota filled	0	--	0	0	0
Total phone numbers used	11100	--	12364	17487	160997
Response Rate 3	23.8%	--	30.1%	22.7%	18.6%



**TABLE 21: Cell Phone Response Rates by Country**

Eligible, Interview (Category 1)	Australia	Canada	France	Germany	Nether-lands
Complete	500	--	--	--	75
<b>Eligible, non-interview (Category 2)</b>					
Refusal and breakoff	16	--	--	--	27
Break off	3	--	--	--	0
Answering machine	10	--	--	--	0
Physically or mentally unable/incompetent	0	--	--	--	0
Deleted interview	0	--	--	--	0
Language Problem	0	--	--	--	0
<b>Unknown eligibility, non-interview (Category 3)</b>					
Always busy	2373	--	--	--	0
No answer	15027	--	--	--	152
Answering machine-don't know if household	28583	--	--	--	182
Call blocking	0	--	--	--	0
Housing unit, unknown if eligible respondent	2183	--	--	--	120
No screener completed	34	--	--	--	36
<b>Not eligible (Category 4)</b>					
Fax/data line	458	--	--	--	20
Non-working number	1748	--	--	--	600
Business, government office, other organizations	291	--	--	--	171
No eligible respondent	5274	--	--	--	1412
Quota filled	0	--	--	--	0
Total phone numbers used	56500	--	--	--	2795
Response Rate 3	12.7%	--	--	--	58.8%





**TABLE 21: Cell Phone Response Rates by Country Cont'd**

Eligible, Interview (Category 1)	New Zealand	Norway	Sweden	United Kingdom	United States
Complete	100	--	3500	50	276
<b>Eligible, non-interview (Category 2)</b>					
Refusal and breakoff	6	--	4218	188	53
Break off	0	--	3716	0	17
Answering machine	5	--	700	7	11
Physically or mentally unable/incompetent	0	--	202	2	2
Deleted interview	0	--	0	0	1
Language Problem	0	--	0	0	3
<b>Unknown eligibility, non-interview (Category 3)</b>					
Always busy	28	--	0	0	301
No answer	511	--	0	2572	3714
Answering machine-don't know if household	669	--	0	1953	6718
Call blocking	0	--	0	14	31
Housing unit, unknown if eligible respondent	618	--	0	525	6940
No screener completed	5	--	0	215	280
<b>Not eligible (Category 4)</b>					
Fax/data line	13	--	0	260	135
Non-working number	117	--	282	789	14297
Business, government office, other organizations	59	--	0	82	745
No eligible respondent	1069	--	24	1503	3718
Quota filled	0	--	0	0	0
Total phone numbers used	3200	--	12642	8160	37242
Response Rate 3	36.7%	--	28.4%	8.9%	19.5%



**TABLE 22: Total Response Rates by Country**

Eligible, Interview (Category 1)	Australia	Canada	France	Germany	Netherlands
Complete	2500	4549	750	751	750
Eligible, non-interview (Category 2)					
Refusal and breakoff	181	21349	36	297	120
Break off	7	2697	4	26	8
Answering machine	35	3070	9	124	25
Physically or mentally unable/incompetent	25	1692	7	33	28
Deleted interview	0	1508	16	16	0
Language Problem	0	2	0	0	0
Unknown eligibility, non-interview (Category 3)					
Always busy	5291	1282	197	0	0
No answer	19856	17428	6793	2509	1498
Answering machine-don't know if household	35678	5244	4102	5261	443
Call blocking	0	282	0	6	0
Housing unit, unknown if eligible respondent	6188	2561	1440	3503	782
No screener completed	135	155	57	429	99
Not eligible (Category 4)					
Fax/data line	1021	2585	227	482	221
Non-working number	3675	33632	106	577	1288
Business, government office, other organizations	1889	3603	771	704	968
No eligible respondent	9919	10195	1601	2672	3726
Quota filled	0	0	0	0	0
Total phone numbers used	86400	111834	16116	17390	9956
Response Rate 3	25.3%	23.2%	23.5%	19.0%	52.1%



**TABLE 22: Total Response Rates by Country Cont'd**

Eligible, Interview (Category 1)	New Zealand	Norway	Sweden	United Kingdom	United States
Complete	500	750	7000	753	1392
Eligible, non-interview (Category 2)					
Refusal and breakoff	25	3230	9355	543	4209
Break off	2	488	5863	12	1226
Answering machine	12	493	911	115	1395
Physically or mentally unable/incompetent	7	0	847	12	156
Deleted interview	0	0	0	0	4
Language Problem	0	0	0	0	207
Unknown eligibility, non-interview (Category 3)					
Always busy	231	0	0	0	2310
No answer	3507	0	0	7397	18300
Answering machine-don't know if household	2845	0	0	4739	9908
Call blocking	0	0	0	35	107
Housing unit, unknown if eligible respondent	1976	0	0	3338	7506
No screener completed	20	0	0	564	464
Not eligible (Category 4)					
Fax/data line	225	37	0	765	2482
Non-working number	1918	0	980	2206	141101
Business, government office, other organizations	1014	0	0	1206	2503
No eligible respondent	2018	2	50	3962	4969
Quota filled	0	0	0	0	0
Total phone numbers used	14300	5000	25006	25647	198239
Response Rate 3	26.4%	15.1%	29.2%	21.7%	18.8%

**TABLE 23: Total Response Rates for Switzerland**

	Switzerland
Total records	7424
Ineligibles	163
Valid sample	7261
Completes	3238
Response Rate	44.6%



## WEIGHTING OVERVIEW

Data from each country were weighted to ensure the final outcome was representative of the 65+ adult population. The weighting procedure accounted for the sample design and probability of selection, as well as systematic non-response across known population parameters. To the extent possible, the weighting procedure replicated the 2014 weighting protocol (which was an age 55 plus study), but adjusted for the age 65 plus segment of the population.<sup>6</sup>

Survey data in each country were weighted by key demographic variables (e.g., region, age, gender, educational attainment).<sup>7</sup> Population parameters were derived, for each country from the most recent census information available (year of census varied). Additionally, a weighting adjustment was included in Norway and Switzerland to address differences in the probabilities of reaching respondents with more than a single telephone number (in Norway) or a respondent without a phone number (in Switzerland).

Below are the detailed procedures by country.

### Detailed Weighting Procedures by Country

#### Australia

The weighting procedure for Australia needed to address several issues:

1. The over-representation of New South Wales in the overall Australian data.
2. The over-representation of Victoria in the overall Australian data.
3. The need to accurately represent the overall Australian adult (65+) population as well as the overall adult New South Wales and Victoria populations for province-specific analyses.
4. Differences in the probability of selection by:
  - a. The number of adults 65 and older in the household, since in households reached by landline only one adult was selected, respondents living in households with more than one adult, age 65+ had a lower probability of selection.
  - b. The types of phone selected respondents answer: respondents whose households answer both landlines and cell phones have a greater probability of selection than those answering just one mode.
5. Systematic non-response along known geographic and demographic parameters

To address these concerns the following steps were taken:

- 1&2. The NSW, Victoria, and all remaining Australia data were weighted separately, so that each of these subsamples (NSW, Victoria, other) accurately represented the population.
3. To address concerns about probability of selection:

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<sup>6</sup> Given the overall low expected incidence of cell phone-only status for this age-group and there not being always reliably available data about phone status for this group, phone-status was not used as a weighting parameter.

<sup>7</sup> Missing data for gender, age and other variables were imputed using a Hot Deck procedure prior to raking.



- a. Within Household Correction (WHC): Respondents reached by landline phone and living in households with 2 or more adults 65+ received a weight of 2. Those living in single adult households, received a weight of 1. Since no selection was done in cell phone households, the probability of selection there was 1.
  - b. Dual-Usage Correction (DUC): Adults answering both landlines and cell phones received a weight of 0.5. Those answering only a single mode, received a weight of 1.
4. A baseweight was created equaling the product of WHC X DUC.
5. Post-stratification weighting: With the base-weight applied, each subsample (NSW, Victoria, other) underwent iterative proportional fitting (IPF or 'raking'), a procedure in which the data are repeatedly balanced to match the known marginal distribution of population parameters. This procedure was repeated until the total differences between the weighted sample and the population parameters and the weighed data were near zero. Tables 24 and 25 compare the distributions of weighted and unweighted data and the population parameters for NSW, Victoria, and Australia as a whole. Parameters used for the Australian sample were state, age-by-gender, educational attainment, and urban status (major city or not). Population parameters were derived from the following sources:
  - The Australian Bureau of Statistics, 2011 Census, for all parameters other than the Victoria-specific parameters identified below.
  - For Victoria, gender, age and health region were based on the "By sex, age group, single year of age, Metro/Rural area, DHHS region and LGA" report provided by the Department of Health and Human Services as at 30 June 2015.
6. Weight truncation ('trimming'): To reduce variance caused by extremely large weights, the weights were truncated at the top/bottom 5% for NSW, and top/bottom 2.5% for Victoria and the rest of Australia.
7. Geographic representation: In the final weighting step, the NSW and Victoria weights were decreased and the remaining weights increased so that the share of NSW and Victoria responses reflect the share of NSW and Victoria among Australian 65+ adults and the share of other states likewise reflect their share of the 65+ adult population.



**TABLE 24: Weighted and Unweighted Distributions and Population Parameters for total Australia and Australia Excluding NSW and Victoria**

	AUS Total- Unweighted	AUS Total -Weighted	AUS Total -Adults	Non-NSW/VIC- Unweighted	Non-NSW/VIC -Weighted	Non-NSW/VIC -Adults
<b>Gender by Age</b>						
Male 65-69	19.5%	15.5%	15.1%	22.2%	16.0%	15.8%
Male 70-74	12.4%	11.6%	11.4%	12.3%	11.7%	11.6%
Male 75+	14.1%	19.0%	19.3%	13.3%	19.1%	18.8%
Female 65-69	21.0%	15.8%	15.4%	16.7%	15.9%	15.8%
Female 70-74	14.6%	12.3%	12.1%	20.2%	12.4%	12.2%
Female 75+	18.4%	25.8%	26.7%	15.3%	24.8%	25.7%
<b>Education</b>						
High School or Less	37.2%	65.3%	65.8%	46.9%	64.9%	65.7%
Some Post-Secondary	30.4%	23.9%	23.5%	29.6%	24.5%	24.0%
University Degree or more	32.4%	10.9%	10.6%	23.5%	10.6%	10.3%
<b>Urban Status</b>						
Major City	60.3%	65.9%	65.3%	65.4%	67.4%	65.1%
Not Major City	39.7%	34.1%	34.7%	34.6%	32.6%	34.9%
<b>Region/Strata</b>						
NSW	47.0%	33.8%	33.8%	-	-	-
Victoria	44.9%	25.3%	25.3%	-	-	-
Queensland	4.0%	19.0%	18.9%	-	-	-
Western Australia	1.6%	8.9%	9.1%	-	-	-
South Australia	1.5%	8.7%	8.6%	-	-	-
Tasmania	0.8%	2.7%	2.7%	-	-	-
Australian Capital Territory	0.1%	1.3%	1.3%	-	-	-
Northern Territory	0.1%	0.4%	0.4%	-	-	-

**TABLE 25: Weighted and Unweighted Distributions and Population Parameters for NSW and VICTORIA**

	NSW- Unweighted	NSW- Weighted	NSW- Adults	Victoria- Unweighted	Victoria- Weighted	Victoria- Adults
<b>Gender by Age</b>						
Male 65-69	20.1%	14.9%	14.8%	18.4%	15.3%	15.4%
Male 70-74	11.7%	11.4%	11.2%	13.2%	11.6%	11.4%
Male 75+	14.0%	19.2%	19.5%	14.3%	18.8%	19.3%
Female 65-69	22.1%	15.3%	15.1%	20.6%	16.3%	16.2%
Female 70-74	13.7%	12.0%	12.1%	14.5%	12.7%	12.2%
Female 75+	18.3%	27.3%	27.3%	19.1%	25.3%	25.6%
<b>Education</b>						
High School or Less	37.7%	65.0%	65.0%	34.8%	66.3%	67.1%
Some Post-Secondary	31.2%	24.0%	24.0%	29.7%	22.6%	22.1%
University Degree or more	31.0%	11.0%	11.0%	35.5%	11.1%	10.8%
<b>Urban Status</b>						
Major City	51.4%	63.2%	63.7%	68.7%	67.2%	67.6%
Not Major City	48.6%	36.8%	36.3%	31.3%	32.8%	32.4%
<b>Health Regions</b>						
Rural	-	-	-	33.1%	32.1%	31.4%
N. & W. Metro. (Urban)	-	-	-	26.9%	24.5%	25.1%
S. Metro. (Urban)	-	-	-	21.4%	23.6%	23.8%
E. Metro. (Urban)	-	-	-	18.6%	19.8%	19.7%



## Canada

Survey data for Canada were weighted by age-by-gender, and educational attainment within each of the ten provinces. Data were weighted for knowledge of official language within Quebec and Canada as a whole. Additionally, data were weighted to reflect Canada's overall geographic distribution, by provinces and territories. The weighting needed to address several issues:

1. Over- and under-representation of provinces as a result of sample design.
2. The need to accurately represent overall 65+ adult Canadian population as well as the overall 65+ adult populations in each of the provinces.
3. Differences in the probability of selection by the number of 65+ adults in the household, since in households reached by landline only one adult was selected, respondents living in households with more than one adult, age 65+, had a lower probability of selection.
4. Systematic non-response along known geographic and demographic parameters.

To address these concerns the following steps were taken:

- 1/2. Data for each of ten provinces were weighted separately, so that each subsample accurately represented the corresponding population.
3. To address concerns about probability of selection:
  - a. Within Household Correction (WHC): Respondents reached by landline phone and living in households with 2 or more adults 65+ received a weight of 2.
  - b. A baseweight was created equaling WHC.
4. Post-stratification weighting: With the base-weight applied, each province subsample underwent iterative proportional fitting (IPF or 'raking'), a procedure in which the data are repeatedly balanced to match the known marginal distribution of population parameters. This procedure was repeated until the total differences between the weighted sample and the population parameters and the weighed data were near zero. Tables 26 to 31 below compare the distributions of weighted and unweighted data and the population parameters for Quebec, Ontario, Alberta, and Canada as a whole. Parameters used for the Canadian sample were province (for the overall regional balancing adjustment), age-by-gender, educational attainment, and knowledge of official languages (only within Quebec and on Canada as a whole).
  - Region and gender and age were derived from the Canada 2016 Census.
  - Knowledge of official language and Education data were based on the 2011 Census.<sup>8</sup>

SSRS obtained populations estimates from Statistics Canada for the adult population (age 65 or older) for each of the ten provinces and for Canada as a whole. Data were provided for Canada as a whole and, specifically, for all ten provinces.

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<sup>8</sup> These parameters are based on the 2011 Census. Note that updated distributions for these parameters were not available prior to data delivery for IHP 2017. Statistics Canada will be releasing these data in August (Language) and November (Education), 2017.



5. Weight truncation ('trimming'): To reduce variance caused by extremely large weights, the weights were truncated (at the per province level prior to the final regional and language overall rebalancing) to top/bottom 2.5%.
6. Geographic representation: In the final weighting step, the weights were decreased and or increased as necessary so that the share of each province reflected the share of that province among Canadian 65+ adults.

**TABLE 26: Weighted and Unweighted Distributions and Population Parameters for Newfoundland and Labrador and Prince Edward Island**

	NL- Unweighted	NL- Weighted	NL- Adults	PEI- Unweighted	PEI- Weighted	PEI- Adults
<b>Gender by Age</b>						
Male 65-69	14.7%	18.2%	18.1%	12.0%	17.4%	17.4%
Male 70-74	8.7%	13.0%	12.6%	12.4%	13.0%	11.4%
Male 75+	10.7%	15.6%	16.0%	12.7%	17.4%	16.8%
Female 65-69	21.8%	19.5%	19.0%	18.3%	17.4%	18.4%
Female 70-74	17.5%	13.0%	13.3%	15.1%	13.0%	12.5%
Female 75+	26.6%	20.8%	21.0%	29.5%	21.7%	23.5%
<b>Education</b>						
High School or Less	48.4%	70.1%	70.0%	51.2%	56.5%	56.4%
Some Post-Secondary	31.1%	19.5%	19.9%	34.4%	30.4%	29.1%
University Degree or more	20.5%	10.4%	10.1%	14.4%	13.0%	14.6%

**TABLE 27: Weighted and Unweighted Distributions and Population Parameters for Nova Scotia and New Brunswick**

	NS- Unweighted	NS- Weighted	NS- Adults	NB- Unweighted	NB- Weighted	NB- Adults
<b>Gender by Age</b>						
Male 65-69	11.8%	15.9%	16.8%	13.7%	17.7%	17.2%
Male 70-74	10.2%	10.9%	11.7%	14.0%	10.6%	11.9%
Male 75+	14.1%	17.4%	16.9%	15.5%	15.0%	16.9%
Female 65-69	18.8%	18.1%	17.9%	19.2%	20.4%	17.9%
Female 70-74	18.0%	13.0%	12.8%	13.7%	10.6%	12.3%
Female 75+	27.1%	24.6%	23.9%	24.0%	25.7%	23.8%
<b>Education</b>						
High School or Less	45.5%	57.9%	57.0%	45.0%	64.3%	63.2%
Some Post-Secondary	30.0%	27.1%	27.7%	34.9%	24.1%	24.6%
University Degree or more	24.5%	15.0%	15.3%	20.1%	11.6%	12.2%





**TABLE 28: Weighted and Unweighted Distributions and Population Parameters for Ontario and Quebec**

	QC- Unweighted	QC- Weighted	QC- Adults	ON- Unweighted	ON- Weighted	ON- Adults
<b>Gender by Age</b>						
Male 65-69	12.2%	15.6%	15.8%	10.6%	14.9%	15.7%
Male 70-74	9.9%	11.8%	11.8%	10.5%	11.1%	11.1%
Male 75+	12.4%	17.2%	17.1%	15.5%	18.5%	18.3%
Female 65-69	20.5%	17.0%	16.8%	16.6%	17.3%	17.1%
Female 70-74	18.9%	13.4%	13.2%	15.4%	12.4%	12.4%
Female 75+	26.0%	25.2%	25.2%	31.4%	25.8%	25.4%
<b>Education</b>						
High School or Less	51.9%	63.4%	63.1%	43.7%	56.9%	57.4%
Some Post-Secondary	20.1%	20.0%	20.3%	27.8%	24.7%	24.3%
University Degree or more	28.0%	16.6%	16.6%	28.5%	18.4%	18.3%
<b>Language</b>						
English Only	3.4%	6.2%	6.4%	-	-	-
French Only	52.0%	60.9%	60.8%	-	-	-
Both	44.6%	32.9%	32.8%	-	-	-

**TABLE 29: Weighted and Unweighted Distributions and Population Parameters for Manitoba and Saskatchewan**

	MB- Unweighted	MB- Weighted	MB- Adults	SK- Unweighted	SK- Weighted	SK- Adults
<b>Gender by Age</b>						
Male 65-69	10.9%	14.5%	15.7%	13.6%	15.4%	15.4%
Male 70-74	12.9%	11.2%	11.0%	6.8%	10.0%	10.7%
Male 75+	12.1%	18.4%	18.0%	12.8%	19.2%	19.2%
Female 65-69	13.7%	17.1%	16.9%	16.0%	16.2%	15.8%
Female 70-74	15.3%	12.5%	12.1%	13.6%	11.5%	11.4%
Female 75+	35.1%	26.3%	26.3%	37.2%	27.7%	27.4%
<b>Education</b>						
High School or Less	45.0%	61.3%	60.8%	46.8%	62.3%	61.6%
Some Post-Secondary	28.5%	23.3%	23.7%	30.2%	23.8%	24.2%
University Degree or more	26.4%	15.3%	15.5%	23.0%	13.8%	14.1%

**TABLE 30: Weighted and Unweighted Distributions and Population Parameters for Alberta and British Columbia**

	AB- Unweighted	AB- Weighted	AB- Adults	BC- Unweighted	BC- Weighted	BC- Adults
<b>Gender by Age</b>						
Male 65-69	13.2%	16.8%	17.1%	10.2%	15.1%	16.4%
Male 70-74	11.6%	11.5%	11.3%	10.6%	11.1%	11.5%
Male 75+	22.8%	18.1%	17.9%	17.9%	18.7%	18.7%
Female 65-69	11.6%	17.5%	17.6%	13.4%	17.2%	17.4%
Female 70-74	9.2%	12.3%	12.1%	17.9%	12.0%	12.3%
Female 75+	31.6%	23.8%	23.9%	30.1%	25.9%	23.7%
<b>Education</b>						
High School or Less	37.1%	54.4%	54.6%	31.2%	52.2%	51.4%
Some Post-Secondary	33.5%	27.6%	27.7%	37.2%	27.8%	28.2%
University Degree or more	29.4%	18.0%	17.8%	31.6%	20.0%	20.4%



**TABLE 31: Weighted and Unweighted Distributions and Population Parameters for Canada as a whole**

	Canada-Unweighted	Canada-Weighted	Canada-Adults
<b>Gender by Age</b>			
Male 65-69	11.8%	15.5%	16.0%
Male 70-74	10.6%	11.3%	11.4%
Male 75+	14.5%	18.0%	17.9%
Female 65-69	17.5%	17.3%	17.2%
Female 70-74	16.0%	12.6%	12.5%
Female 75+	29.6%	25.4%	24.9%
<b>Education</b>			
High School or Less	45.5%	58.3%	58.3%
Some Post-Secondary	28.3%	24.2%	24.2%
University Degree or more	26.2%	17.5%	17.5%
<b>Language</b>			
English Only	69.2%	69.4%	69.2%
French Only	11.6%	16.3%	16.4%
Both	19.2%	14.3%	14.4%
<b>Region/Strata</b>			
Newfoundland and Labrador	5.6%	1.7%	1.7%
Prince Edward Island	5.6%	0.5%	0.5%
Nova Scotia	5.7%	3.1%	3.1%
New Brunswick	6.0%	2.5%	2.5%
Quebec	22.0%	25.2%	25.2%
Ontario	33.1%	37.9%	37.9%
Manitoba	5.5%	3.4%	3.4%
Saskatchewan	5.5%	2.9%	2.9%
Alberta	5.5%	8.4%	8.4%
British Columbia	5.5%	14.3%	14.3%
Territories	0.1%	0.1%	0.1%

## France

The weighting procedure for France addressed several issues:

1. The need to accurately represent the overall 65+ adult French population.
2. Differences in the probability of selection by:
  - a. The number of 65+ adults in the household, since in households reached by landline only one adult was selected, respondents living in households with more than one adult, age 65+, had a lower probability of selection.
3. Systematic non-response along known geographic and demographic parameters

To address these concerns the following steps were taken:

1. To address concerns about probability of selection:
  - a. Within Household Correction (WHC): Respondents reached by landline phone and living in households with 2 or more 65+ adults received a weight of 2. Those living in single adult households, received a weight of 1.
  - b. A baseweight was created equaling WHC.



2. Post-stratification weighting: With the base-weight applied, the sample underwent iterative proportional fitting (IPF or ‘raking’), a procedure in which the data are repeatedly balanced to match the known marginal distribution of population parameters. This procedure was repeated until the total differences between the weighted sample and the population parameters and the weighed data were near zero. Table 32 below compares the distributions of weighted and unweighted data and the population parameters for France as a whole. Parameters used for the French sample were region, age-by-gender, and educational attainment, to reflect the demographic composition according to the following sources:
  - Gender and age are based on 2017 data from the Institute of Statistics and Economic Studies (INSEE).
  - Region is based on 2016 data from the INSEE.
  - Education was based on data from the 2014 INSEE’s Employment Survey for the age 65 plus segment of the population.
3. Weight truncation (‘trimming’): To reduce variance caused by extremely large weights, the weights were truncated to top/bottom 5%.

**TABLE 32: Weighted and Unweighted Distributions and Population Parameters for France**

	France-Unweighted	France-Weighted	France-Adults
<b>Gender by Age</b>			
Male 65-69	17.5%	13.9%	13.8%
Male 70-74	10.7%	10.5%	10.5%
Male 75+	16.3%	18.9%	18.8%
Female 65-69	18.5%	15.6%	15.4%
Female 70-74	12.7%	12.1%	12.1%
Female 75+	24.4%	28.9%	29.4%
<b>Education</b>			
High School or Less / Some Post-Secondary	79.5%	85.9%	86.1%
University Degree or more	20.5%	14.1%	13.9%
<b>Region/Strata</b>			
Grand Est	8.3%	8.5%	8.5%
Nouvelle Aquitaine	10.4%	10.8%	10.9%
Auvergne-Rhône-Alpes	10.8%	12.0%	12.2%
Bourgogne-Franche-Comté	5.1%	4.9%	5.0%
Bretagne	5.3%	5.7%	5.7%
Centre-Val-de-Loire	3.1%	4.3%	4.4%
Corse	0.5%	0.7%	0.6%
Île-de-France	15.7%	14.3%	14.2%
Occitanie	10.1%	10.3%	10.2%
Hauts-de-France	10.0%	8.3%	8.2%
Normandie	5.6%	5.5%	5.4%
Pays de la Loire	6.0%	5.9%	5.9%
Provence-Alpes-Côte d'Azur	9.1%	8.9%	8.9%



## Germany

The weighting procedure for Germany addressed several issues:

1. The need to accurately represent the overall 65+ adult German population.
2. Differences in the probability of selection by the number of 65+ adults in the household, since in households reached by landline only one adult was selected, respondents living in households with more than one adult, age 65+, had a lower probability of selection.
3. Systematic non-response along known geographic and demographic parameters

To address these concerns the following steps were taken:

1. To address concerns about probability of selection:
  - a. Within Household Correction (WHC): Respondents reached by landline phone and living in households with 2 or more 65+ adults received a weight of 2. Those living in single adult households, received a weight of 1.
  - b. A baseweight was created equaling WHC.
2. Post-stratification weighting: With the base-weight applied, the sample underwent iterative proportional fitting (IPF or 'raking'), a procedure in which the data are repeatedly balanced to match the known marginal distribution of population parameters. This procedure was repeated until the total differences between the weighted sample and the population parameters and the weighed data were near zero. Table 33 below compares the distributions of weighted and unweighted data and the population parameters for Germany as a whole. Parameters used for the German sample were region, age-by-gender, and educational attainment.
  - Gender, age and region were weighted to reflect the demographic composition based on 2011 Census data from Eurostat.
  - Education was based on data from Statistisches Bundesamt 2015.
3. Weight truncation ('trimming'): To reduce variance caused by extremely large weights, the weights were truncated to top/bottom 5%.



**TABLE 33: Weighted and Unweighted Distributions and Population Parameters for Germany**

	Germany-Unweighted	Germany -Weighted	Germany -Adults
<b>Gender by Age</b>			
Male 65-69	14.0%	12.5%	12.1%
Male 70-74	7.2%	12.4%	13.7%
Male 75+	21.5%	17.3%	16.8%
Female 65-69	12.2%	13.6%	13.2%
Female 70-74	10.9%	15.3%	16.0%
Female 75+	34.2%	28.9%	28.1%
<b>Education</b>			
High School or Less	57.6%	64.2%	64.7%
Some Post-Secondary	21.9%	19.7%	19.4%
University Degree or more	20.4%	16.1%	15.9%
<b>Region/Strata</b>			
Schleswig-Holstein	5.1%	3.9%	3.7%
Hamburg	2.9%	2.1%	2.0%
Bremen	0.9%	0.8%	0.8%
Niedersachsen	9.6%	9.8%	9.8%
Nordrhein-Westfalen	16.4%	21.0%	21.6%
Rheinland-Pfalz	3.6%	4.5%	4.9%
Saarland	1.1%	1.3%	1.3%
Hessen	7.1%	7.2%	7.2%
Baden-Württemberg	11.7%	12.4%	12.3%
Bayern	16.8%	14.9%	14.6%
Berlin	6.3%	4.0%	3.8%
Mecklenburg-Vorpommern	2.0%	2.1%	2.1%
Brandenburg	3.3%	3.3%	3.3%
Sachsen-Anhalt	4.7%	3.5%	3.3%
Thüringen	3.3%	3.2%	3.1%
Freistaat Sachsen	5.3%	6.1%	6.1%

### The Netherlands

The weighting procedure for The Netherlands addressed several issues:

1. The need to accurately represent the overall 65+ adult Dutch population.
2. Differences in the probability of selection by:
  - a. The number of 65+ adults in the household, since in households reached by landline only one adult was selected, respondents living in households with more than one adult, age 65+, had a lower probability of selection.
  - b. The types of phone selected respondents answer: respondents whose households answer both landlines and cell phones have a greater probability of selection than those answering just one mode.
3. Systematic non-response along known geographic and demographic parameters.

To address these concerns the following steps were taken:

1. To address concerns about probability of selection:
  - a. Within Household Correction (WHC): Respondents reached by landline phone and living in households with 2 or more 65+ adults received a weight of 2. Those living in single adult



households, received a weight of 1. Since no selection was done in cell phone households, the probability of selection there was 1.

- b. Dual-Usage Correction (DUC): Adults answering both landlines and cell phones received a weight of 0.5. Those answering only a single mode, received a weight of 1.
  - c. A baseweight was created equaling the product of WHC X DUC.
2. Post-stratification weighting: With the base-weight applied, the sample underwent iterative proportional fitting (IPF or 'raking'), a procedure in which the data are repeatedly balanced to match the known marginal distribution of population parameters. This procedure was repeated until the total differences between the weighted sample and the population parameters and the weighed data were near zero. Table 34 below compares the distributions of weighted and unweighted data and the population parameters for The Netherlands as a whole. Parameters used for the Netherlands sample were region and age-by-gender.
- Gender and age were based on Statistics Netherland's 2015 Population.
  - Region was based on 2011 Census data from Eurostat.
3. Weight truncation ('trimming'): To reduce variance caused by extremely large weights, the weights were truncated to top/bottom 5%.

**TABLE 34: Weighted and Unweighted Distributions and Population Parameters for the Netherlands**

	Netherlands-Unweighted	Netherlands -Weighted	Netherlands -Adults
<b>Gender by Age</b>			
Male 65-69	19.1%	16.9%	16.7%
Male 70-74	12.4%	11.6%	11.5%
Male 75+	15.2%	16.8%	17.1%
Female 65-69	11.7%	16.4%	17.0%
Female 70-74	14.0%	12.5%	12.3%
Female 75+	27.6%	25.7%	25.4%
<b>Region/Strata</b>			
Drenthe	3.1%	3.2%	3.4%
Flevoland	1.3%	1.5%	1.5%
Friesland	6.0%	4.4%	4.2%
Gelderland	13.7%	12.4%	12.3%
Groningen	3.1%	3.5%	3.6%
Limburg	7.2%	8.0%	8.0%
Noord-Brabant	15.1%	15.2%	15.2%
Noord-Holland	17.1%	15.6%	15.3%
Overijssel	6.0%	6.8%	6.8%
Utrecht	7.2%	6.7%	6.5%
Zeeland	3.5%	2.8%	2.8%
Zuid-Holland	16.8%	19.9%	20.3%

### New Zealand

The weighting procedure for New Zealand addressed several issues:

1. The need to accurately represent the overall 65+ New Zealand adult population.
2. Differences in the probability of selection by:



- a. The number of 65+ adults in the household, since in households reached by landline only one adult was selected, respondents living in households with more than one adult, age 65+, had a lower probability of selection.
  - b. The types of phone selected respondents answer: respondents whose households answer both landlines and cell phones have a greater probability of selection than those answering just one mode.
3. Systematic non-response along known geographic and demographic parameters.

To address these concerns the following steps were taken:

1. To address concerns about probability of selection:
  - a. Within Household Correction (WHC): Respondents reached by landline phone and living in households with 2 or more adults received a weight of 2. Those living in single adult households, received a weight of 1. Since no selection was done in cell phone households, the probability of selection there was 1.
  - b. Dual-Usage Correction (DUC): Adults answering both landlines and cell phones received a weight of 0.5. Those answering only a single mode, received a weight of 1.
  - c. A baseweight was created equaling the product of WHC X DUC.
2. Post-stratification weighting: With the base-weight applied, the sample underwent iterative proportional fitting (IPF or 'raking'), a procedure in which the data are repeatedly balanced to match the known marginal distribution of population parameters. This procedure was repeated until the total differences between the weighted sample and the population parameters and the weighed data were near zero. Table 35 below compares the distributions of weighted and unweighted data and the population parameters for New Zealand as a whole. Parameters used for New Zealand sample were region (in 4 groups), age-by-gender, and educational attainment.
  - Gender, age and region were based on 2018 projections from Statistics New Zealand.
  - Education was derived from the 2013 Census of Population and Dwellings, provided to SSRS by Statistics New Zealand.
3. Weight truncation ('trimming'): To reduce variance caused by extremely large weights, the weights were truncated to top/bottom 2.5%.



**TABLE 35: Weighted and Unweighted Distributions and Population Parameters for New Zealand**

	New Zealand -Unweighted	New Zealand -Weighted	New Zealand -Adults
<b>Gender by Age</b>			
Male 65-69	22.8%	15.8%	15.4%
Male 70-74	9.8%	12.6%	12.6%
Male 75+	12.2%	17.4%	18.5%
Female 65-69	23.4%	16.8%	16.3%
Female 70-74	13.6%	13.8%	13.5%
Female 75+	18.2%	23.8%	23.6%
<b>Education</b>			
Secondary or less (Up to Level 6)	79.0%	90.2%	89.9%
University Degree or more (Levels 7 through post grad)	21.0%	9.8%	10.1%
<b>Region/Strata</b>			
Auckland	23.6%	26.6%	27.8%
North	34.8%	30.2%	30.1%
Central	17.0%	16.2%	15.9%
South	23.2%	25.8%	26.2%

## Norway

The weighting procedure for Norway addressed several issues:

1. The need to accurately represent the overall 65+ adult Norwegian population.
2. Differences in the probability of selection by:
  - a. The number of phones selected respondents answer: respondents with more than one phone in the registry have a higher probability of selection than those with one phone.
3. Systematic non-response along known geographic and demographic parameters.

To address these concerns the following steps were taken:

1. To address concerns about probability of selection:
  - a. Phone Probability (PP): A weighting adjustment was included to address differences in the probabilities of reaching respondents with more than a single telephone number. Although probability of selection from the registry was identical for all respondents in the registry, those with more than one telephone number may have a better chance of being reached. To that end, a baseweight adjustment was added matching the share of respondents, in the final data, that could be reached by more than one phone number to their share in the sample.
  - b. A baseweight was created equaling PP.

**TABLE 36: Phone Probability**

	Benchmark (%)	Data (%)	Weight
Single telephone number	72.6	67.2	1.08
More than one telephone number	27.4	32.8	0.84





2. Post-stratification weighting: With the base-weight applied, the sample underwent iterative proportional fitting (IPF or 'raking'), a procedure in which the data are repeatedly balanced to match the known marginal distribution of population parameters. This procedure was repeated until the total differences between the weighted sample and the population parameters and the weighed data were near zero. Table 37 below compares the distributions of weighted and unweighted data and the population parameters for Norway as a whole. Parameters used for the Norway sample were region, age-by-gender, and educational attainment. Population parameters were derived from the following sources:
  - Gender, age and region were based on Statistic Norway's tabulation for "Population 1 January, by region, sex, age, time and contents."
  - Education was based on Statistics Norway's 2015 age 60-66 and age 67 plus data adjusted for the age 65 plus segment.
3. Weight truncation ('trimming'): To reduce variance caused by extremely large weights, the weights were truncated to top/bottom 5%.



**TABLE 37: Weighted and Unweighted Distributions and Population Parameters for Norway**

	Norway-Unweighted	Norway - Weighted	Norway - Adults
<b>Gender by Age</b>			
Male 65-69	15.3%	15.7%	15.6%
Male 70-74	16.5%	13.1%	12.9%
Male 75+	16.7%	17.1%	17.3%
Female 65-69	16.3%	15.6%	15.6%
Female 70-74	14.9%	13.9%	13.6%
Female 75+	20.3%	24.7%	24.8%
<b>Education</b>			
HS or LESS (Basic + Upper)	49.0%	79.2%	79.4%
University up to 4 years (tertiary short)	28.0%	15.2%	15.2%
University more than 4 years (tertiary long)	23.0%	5.6%	5.4%
<b>Region/Strata</b>			
Østfold	6.8%	6.3%	6.2%
Akershus	11.7%	10.8%	10.7%
Oslo	9.6%	9.2%	9.4%
Hedmark	4.7%	4.8%	4.8%
Oppland	4.8%	4.5%	4.5%
Buskerud	5.6%	5.7%	5.7%
Vestfold	4.4%	5.1%	5.2%
Telemark	4.0%	3.9%	3.9%
Aust-Agder	2.3%	2.3%	2.3%
Vest-Agder	4.5%	3.5%	3.4%
Rogaland	8.0%	7.6%	7.5%
Hordaland	8.1%	9.4%	9.4%
Sogn og Fjordane	2.9%	2.4%	2.4%
Møre og Romsdal	5.1%	5.7%	5.6%
Sør-Trøndelag	6.0%	5.9%	5.8%
Nord-Trøndelag	2.5%	2.8%	3.0%
Nordland	4.7%	5.2%	5.4%
Troms	3.1%	3.3%	3.3%
Finnmark	1.2%	1.5%	1.5%

## Sweden

The weighting procedure for Sweden addressed several issues:

1. The need to accurately represent the overall 65+ adult Swedish population.
2. Differences in the probability of selection by:
  - a. The number of 65+ adults in the household, since in households reached by landline only one adult was selected, respondents living in households with more than one adult, age 65+, had a lower probability of selection.
  - b. The types of phone selected respondents answer: respondents whose households answer both landlines and cell phones have a greater probability of selection than those answering just one mode.
3. Systematic non-response along known geographic and demographic parameters and Over- and under-representation of regions due to sample design.



To address these concerns the following steps were taken:

1. To address concerns about probability of selection:
  - Within Household Correction (WHC): Respondents reached by landline phone and living in households with 2 or more adults received a weight of 2. Those living in single adult households, received a weight of 1. Since no selection was done in cell phone households, the probability of selection there was 1.
  - Dual-Usage Correction (DUC): Adults answering both landlines and cell phones received a weight of 0.5. Those answering only a single mode, received a weight of 1.
  - A baseweight was created equaling the product of WHC X DUC.
2. Post-stratification weighting: With the base-weight applied, the sample underwent iterative proportional fitting (IPF or 'raking'), a procedure in which the data are repeatedly balanced to match the known marginal distribution of population parameters. This procedure was repeated until the total differences between the weighted sample and the population parameters and the weighed data were near zero. Table 38 below compares the distributions of weighted and unweighted data and the population parameters for Sweden as a whole. Parameters used for the Sweden sample were region, age-by-gender, and educational attainment. Population parameters were derived from the following sources:
  - Gender, age, and region were based on Statistics Sweden's 2016 Population.
  - Education was based on Statistic Sweden's tabulation of "Population 16-95+ years of age by level of education, year and age" for 2015, excluding 19-64 year olds.
3. Weight truncation ('trimming'): To reduce variance caused by extremely large weights, the weights were truncated to top/bottom 5%.



**TABLE 38: Weighted and Unweighted Distributions and Population Parameters for Sweden**

	Sweden - Unweighted	Sweden - Weighted	Sweden - Adults
<b>Gender by Age</b>			
Male 65-69	9.8%	13.4%	14.2%
Male 70-74	13.0%	13.3%	13.3%
Male 75+	19.4%	18.8%	18.6%
Female 65-69	12.1%	14.3%	14.6%
Female 70-74	16.6%	14.3%	13.9%
Female 75+	29.1%	25.9%	25.4%
<b>Education</b>			
High School or Less	63.2%	75.0%	75.8%
Some Post-Secondary	8.5%	9.8%	9.8%
University Degree or more	28.3%	15.3%	14.4%
<b>Region/Strata</b>			
Stockholm county	8.6%	16.7%	18.2%
Uppsala county	4.3%	3.5%	3.4%
Södermanland county	4.3%	3.4%	3.3%
Östergötland county	4.3%	4.8%	4.6%
Jönköping county	4.3%	3.9%	3.7%
Kronoberg county	4.3%	2.2%	2.1%
Kalmar county	4.3%	3.1%	3.0%
Gotland county	2.9%	0.8%	0.7%
Blekinge county	4.3%	2.0%	1.9%
Skåne county	7.9%	12.9%	13.1%
Halland county	4.3%	3.6%	3.5%
Västra Götaland county	7.9%	15.5%	16.3%
Värmland county	4.3%	3.4%	3.3%
Örebro county	4.3%	3.3%	3.2%
Västmanland county	4.3%	3.0%	2.9%
Dalarna county	4.3%	3.5%	3.4%
Gävleborg county	4.3%	3.5%	3.4%
Västernorrland county	4.3%	3.0%	2.9%
Jämtland county	4.3%	1.6%	1.5%
Västerbotten county	4.3%	2.9%	2.8%
Norrbottn county	4.3%	3.1%	3.0%

## Switzerland

The weighting procedure for Switzerland addressed several issues:

1. The need to correctly represent the proportion of respondents with and without a phone number match to the registry. This adjustment was done by linguistic region (German, French, and Italian speaking) excluding the cantons of Valais, Vaud, Geneva, and Zurich, which were adjusted separately, for a total of 7 strata crossed by phone and without a phone in the registry, as per the sampling stratification implemented.
2. Systematic non-response along known geographic and demographic parameters.

To address these concerns the following steps were taken:

1. The sample was weighted to balance the number of completed interviews with and without a phone match in the registry according to the sampling stratification plan. Data were weighted to the breakdown in the



total sample pull for phone vs not phone and the regional distribution per data from the Swiss Federal Statistical Office (SFSO) 2015.

**TABLE 39: Linguistic Region Base-Weight**

Linguistic Region	Statistics Switzerland (%)	Data (%)	Weight <sup>9</sup>
<b>Phone</b>			
German (NOT Valais, NOT Vaud, NOT Geneva, and NOT Zurich)	44.9	17.2	2.62
French (NOT Valais, NOT Vaud, NOT Geneva, and NOT Zurich)	4.8	3.9	1.24
Italian (NOT Valais, NOT Vaud, NOT Geneva, and NOT Zurich)	3.7	7.5	0.49
Valais	3.0	8.3	0.37
Vaud	6.4	8.1	0.79
Geneva	3.9	29.7	0.13
Zurich	13.4	8.8	1.52
<b>No Phone</b>			
German (NOT Valais, NOT Vaud, NOT Geneva, and NOT Zurich)	9.1	2.1	4.39
French (NOT Valais, NOT Vaud, NOT Geneva, and NOT Zurich)	1.3	.7	1.76
Italian (NOT Valais, NOT Vaud, NOT Geneva, and NOT Zurich)	1.6	2.6	0.63
Valais	1.2	1.6	0.72
Vaud	2.0	1.9	1.08
Geneva	1.4	6.1	0.23
Zurich	3.1	1.4	2.22

2. Post-stratification weighting: With the base-weight applied, the sample underwent iterative proportional fitting (IPF or 'raking'), a procedure in which the data are repeatedly balanced to match the known marginal distribution of population parameters. This procedure was repeated until the total differences between the weighted sample and the population parameters and the weighed data were near zero. Table 40 below compares the distributions of weighted and unweighted data and the population parameters for Switzerland as a whole. Parameters used for the Switzerland sample were region (Canton), age-by-gender, and educational attainment. Population parameters were derived from the following sources:
  - Gender, age, and region (Canton) from Statistics Switzerland data for 2015.
  - Education from Statistics Switzerland 2015.
3. Weight truncation ('trimming'): To reduce variance caused by extremely large weights, the weights were truncated to top/bottom 5%.

<sup>9</sup> To avoid extremely large or small weights, the maximum weight-value was capped at 2.



**TABLE 40: Weighted and Unweighted Distributions and Population Parameters for Switzerland**

	Switzerland - Unweighted	Switzerland - Weighted	Switzerland - Adults
<b>Gender by Age</b>			
Male 65-69	12.3%	13.9%	14.0%
Male 70-74	14.4%	12.0%	11.7%
Male 75+	20.4%	18.6%	18.4%
Female 65-69	13.2%	14.5%	15.0%
Female 70-74	15.0%	13.3%	13.1%
Female 75+	24.6%	27.7%	27.8%
<b>Education</b>			
High School or Less	69.9%	78.0%	77.8%
Some Post-Secondary	7.0%	10.0%	10.6%
University Degree or more	23.0%	11.9%	11.7%
<b>Region/Strata</b>			
Zürich	10.3%	17.1%	16.6%
Bern	5.8%	14.0%	13.7%
Luzern	1.8%	4.6%	4.5%
Uri	0.1%	0.3%	0.5%
Schwyz	0.7%	1.7%	1.7%
Obwalden	0.1%	0.3%	0.4%
Nidwalden	0.2%	0.5%	0.5%
Glarus	0.2%	0.5%	0.5%
Zug	0.6%	1.3%	1.3%
Fribourg	1.5%	3.2%	3.1%
Solothurn	0.9%	3.0%	3.4%
Basel-Stadt	0.8%	2.5%	2.6%
Basel-Landschaft	1.4%	4.0%	4.0%
Schaffhausen	0.2%	0.8%	1.1%
Appenzell Ausserrhoden	0.2%	0.7%	0.7%
Appenzell Innerrhoden	0.0%	0.1%	0.2%
St. Gallen	1.7%	5.4%	5.8%
Graubünden	1.3%	2.6%	2.6%
Aargau	3.0%	7.6%	7.4%
Thurgau	0.9%	2.7%	3.0%
Ticino	9.6%	5.3%	5.1%
Vaud	10.0%	8.6%	8.4%
Valais	9.9%	4.3%	4.2%
Neuchatel	2.0%	2.3%	2.2%
Geneva	35.8%	5.6%	5.4%
Jura	0.8%	1.0%	1.0%



## The United Kingdom

The weighting procedure for the United Kingdom addressed several issues:

1. The need to accurately represent the overall 65+ adult UK population
2. Differences in the probability of selection by:
  - a. The number of 65+ adults in the household, since in households reached by landline only one adult was selected, respondents living in households with more than one adult, age 65+, had a lower probability of selection.
  - b. The types of phone selected respondents answer: respondents whose households answer both landlines and cell phones have a greater probability of selection than those answering just one mode.
3. Systematic non-response along known geographic and demographic parameters.

To address these concerns the following steps were taken:

1. To address concerns about probability of selection:
  - a. Within Household Correction (WHC): Respondents reached by landline phone and living in households with 2 or more 65+ adults received a weight of 2. Those living in single adult households, received a weight of 1. Since no selection was done in cell phone households, the probability of selection there was 1.
  - b. Dual-Usage Correction (DUC): Adults answering both landlines and cell phones received a weight of 0.5. Those answering only a single mode, received a weight of 1.
  - c. A baseweight was created equaling the product of WHC X DUC.
2. Post-stratification weighting: With the base-weight applied, the sample underwent iterative proportional fitting (IPF or 'raking'), a procedure in which the data are repeatedly balanced to match the known marginal distribution of population parameters. This procedure was repeated until the total differences between the weighted sample and the population parameters and the weighed data were near 0. Table 41 below compares the distributions of weighted and unweighted data and the population parameters for the UK as a whole. Parameters used for the UK sample were region and age-by-gender. Population parameters were derived from the following sources:
  - Gender, age and region were based on the 2015 report on "Population estimates by single year of age and sex for local authorities in the UK, mid-2015" from the Office of National Statistics
3. Weight truncation ('trimming'): To reduce variance caused by extremely large weights, the weights were truncated to top/bottom 5%.



**TABLE 41: Weighted and Unweighted Distributions and Population Parameters for the UK**

	UK - Unweighted	UK - Weighted	UK - Adults
<b>Gender by Age</b>			
Male 65-69	10.2%	14.0%	15.1%
Male 70-74	10.2%	11.2%	11.2%
Male 75+	17.6%	19.0%	19.0%
Female 65-69	15.7%	16.7%	16.0%
Female 70-74	16.7%	12.4%	12.3%
Female 75+	29.6%	26.9%	26.4%
<b>Region/Strata</b>			
Northeast	8.0%	4.6%	4.3%
Yorks & Humber	5.3%	7.8%	8.4%
East Midlands	8.9%	8.0%	7.6%
East	3.3%	6.9%	10.0%
London	9.7%	9.0%	8.6%
South East	20.3%	15.1%	14.5%
South West	11.7%	10.6%	10.1%
West Midlands	6.8%	9.2%	9.0%
North West	11.3%	11.6%	11.2%
Wales	4.6%	5.4%	5.4%
Scotland	8.1%	8.9%	8.5%
Northern Ireland	1.9%	2.7%	2.5%

## The United States

The weighting procedure for the United States addressed several issues:

1. The need to accurately represent the overall 65+ adult US population
2. Differences in the probability of selection by:
  - a) Probability of Selection (phone number): A phone number's probability of selection depends on the number of phone-numbers selected out of the total sample frame. So for each landline number this is calculated as total landline numbers dialed divided by total numbers in the landline frame and conversely for the cell phone numbers this is calculated as total cell phone numbers divided by total numbers in the cell phone frame.
  - b) Probability of Contact: The probability that the sampling unit (households on landlines or respondents on cell phone) will be reached is a product of the number of phones (by type) a respondent or their household answer.
  - c) Probability of Respondent selection: In households reached by landline, a single respondent is selected. Thus, the probability of selection within a household is inversely related to the number of adults in the household.

Total Probability of Selection: This is calculated as the phone number's probability of selection (by frame), multiplied by the number of devices of each type the respondent answers, and for landlines, divided by the number of adults in the household.<sup>10</sup> The sample weights derived at this stage are calculated as the inverse of the probability of selection.

<sup>10</sup> To avoid extremely large or small weights, the maximum number of devices for each type of phone, and the maximum number of adults was capped at 3.





- Age 65+ listed sample adjustment (Age65flag): To address the fact that households with age 65+ exclusive or anyone in the household age 65+ flags were oversampled, data were weighted so that the distribution of respondents with age 65+ exclusive, age 65+ any, less than age 65+, and age missing listed-flags match the estimated distribution of the population.

**TABLE 42: Age 65+ Base-Weight**

Age 65+ listed adjustment	Population Estimate (%)	Data (%)	Weight
Age 65+ exclusive households	13.1	47.4	0.28
Age 65+ any households	18.3	16.7	1.09
Less than age 65+ households	3.8	3.3	1.15
Age missing households	64.8	32.5	1.99

- Post-stratification weighting: With the base-weight applied, the sample underwent iterative proportional fitting (IPF or ‘raking’), a procedure in which the data are repeatedly balanced to match the known marginal distribution of population parameters. This procedure was repeated until the total differences between the weighted sample and the population parameters and the weighed data were near 0. Table 43 below compares the distributions of weighted and unweighted data and the population parameters for the US as a whole.  
Parameters used for the US sample were Census region, age-by-gender, educational attainment, and race/ethnicity. Population parameters were based on the 2017 U.S. Census Bureau’s Current Population Survey (CPS).
- Weight truncation (‘trimming’): To reduce variance caused by extremely large weights, the weights were truncated to top/bottom 5%.



**TABLE 43: Weighted and Unweighted Distributions and Population Parameters for the US**

	US - Unweighted	US - Weighted	US - Adults
<b>Gender by Age</b>			
Male 65-69	9.6%	15.3%	16.0%
Male 70-74	10.6%	12.1%	11.8%
Male 75+	18.6%	17.3%	16.9%
Female 65-69	12.9%	16.7%	18.1%
Female 70-74	15.1%	13.9%	13.6%
Female 75+	33.1%	24.6%	23.6%
<b>Education</b>			
Less than High School	7.6%	12.3%	14.0%
High School	28.2%	31.9%	32.1%
Some Post-Secondary	31.6%	25.0%	24.3%
University Degree or more	32.7%	30.7%	29.6%
<b>Region/Strata</b>			
Northeast	18.5%	18.6%	18.8%
Midwest	36.4%	37.2%	37.0%
South	24.8%	21.8%	21.7%
West	20.3%	22.3%	22.4%
<b>Ethnicity</b>			
White non-Hispanic	83.1%	77.9%	77.0%
Black non-Hispanic	8.1%	9.0%	8.9%
Hispanic	4.7%	7.4%	8.3%
Other non-Hispanic	4.1%	5.8%	5.8%



## Design Effect and Margin of Sampling Error

Weighting procedures increase the variance in the data, with larger weights causing greater variance. Complex survey designs and post-data collection statistical adjustments affect variance estimates and, as a result, tests of significance and confidence intervals. These are weight-adjusted margins-of-error for countries and targeted regions. The margins of error reported apply to estimates of 50%, for smaller or larger estimates, the margin of sampling error will be smaller. Sampling error is only one type of error that could affect survey outcomes.

**TABLE 44: Design Effect and Margin of Error by Country**

	N-Size	Design Effect	Margin of Error
Australia	2500	3.8	3.8
NSW	1175	1.7	3.7
Victoria	1122	1.7	3.8
Rest of Australia	203	1.5	8.5
Canada	4549	1.8	2.0
Newfoundland	254	1.6	7.7
Prince Edward Island	253	1.1	6.5
Nova Scotia	259	1.2	6.8
New Brunswick	273	1.7	7.8
Quebec	1002	1.3	3.6
Ontario	1504	1.3	2.9
Manitoba	250	1.4	7.4
Saskatchewan	251	1.4	7.3
Alberta	250	1.4	7.4
British Columbia	250	1.6	7.9
France	750	1.2	3.9
Germany	751	1.2	4.0
Netherlands	750	1.2	3.9
New Zealand	500	1.4	5.1
Norway	750	1.4	4.3
Sweden	7000	1.6	1.5
Switzerland	3238	2.0	2.5
UK	753	1.3	4.0
US	1392	1.7	3.4

## DELIVERABLES

### Preliminary

SSRS delivered preliminary weighted SPSS and set of three banners to The Commonwealth Fund.

### Final

SSRS delivered the following to the Commonwealth Fund and sponsoring organizations: (1) final weighted SPSS dataset, (2) final weighted all-country and country-specific banners in Microsoft Word and Excel format, (3) final methodology report, (4) a memo on the final survey data and trends, (5) final versions of the questionnaires in English as well as the translated versions, (6) final created variable and banner specification memos, (7) final data quality checks memo, (8) topline results of data, (9) detailed questionnaire crosswalk that includes IHP 2013, 2014, 2016, and 2017 and (10) a memo outlining the weighting procedures.