2015 International Health Policy Survey of Primary Care Doctors Methodology Report

Method report prepared by

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OVERVIEW

The Commonwealth Fund (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 2015 IHP survey conducted among primary care physicians (PCPs) in Australia, Canada, France[1], Germany, the Netherlands, New Zealand, 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, The Minter Group (Minter), fielded the survey in Australia and New Zealand. SSRS's fielding partner, Adkins Research Group (Adkins), fielded the survey in the UK. SSRS's fielding partner, EFG, fielded the survey in France. BQS Institut für Qualität & Patientensicherheit (BQS) conducted the survey in Germany. The Scientific Institute for Quality of Healthcare (IQ healthcare), part of the Radboud university medical center fielded the survey in Norway. The Norwegian Knowledge Centre for the Health Services fielded the survey in Norway. Sweden contracted with Institutet för kvalitetsindikatorer AB (Indikator) to manage the data collection process and field the instrument in Sweden. Switzerland contracted with M.I.S. Trend S.A. to field the survey in Switzerland.

The survey utilized random samples of primary care physicians in eleven countries. Since primary care physicians in many countries treat adults and children (e.g., Australia, New Zealand, the Netherlands, and the UK), a proportional number of pediatricians were also included in countries where primary care physicians exclusively treat adults (US, Germany, and Switzerland) to make the samples across the countries equivalent.
The 2015 study was designed to explore and collect reliable health-related data for the following topics:

- Health System Views, Practice Experience and Practice Satisfaction
- Primary Care Physicians' Perceptions of Patient Access
- Patient Mix and Preparedness
- Caring and Coordinating Care For Patients with Chronic Conditions
- Coordination and Information Flow Between Providers and Sites of Care
- Talking to Patients About End-of-Life Care

[1] The French data collection is ongoing as of the time of this report. The methodology report will be updated with information from France in December 2015.

- Office Systems & Information Technology Use
- Quality Measurement and Improvement

In the fall and winter of 2014, the IHP 2015 questionnaire was developed and revised by The Commonwealth Fund and its international partners. SSRS reviewed the final questionnaire and provided feedback about question wording, order, clarity, logic/programming, and other issues related to questionnaire quality and design across modes. The survey consisted of paper, online and computer-assisted telephone interviews of random samples of primary care doctors in eleven countries, using a common questionnaire that was translated and adjusted for country-specific wording as needed. As in past iterations of the IHP Survey of Primary Care Doctors, different modes (and for several countries multiple modes) were used for data collection. These modes are tailored to best practices for reaching primary care doctors in each country and are consistent with modes used in 2012 and past iterations of the IHP Survey of Primary Care Doctors.[2] Table 1 outlines the total number of completed interviews and modes used for each country for recruitment and completion. Fieldwork took place between March 2 and June 9, 2015. The field times varied by country and are specified in Table 2 below.[3]

TABLE 1: Completed Interviews and Modes of Recruitment/Completion Used for each Country

	Modes of Recruitment/Completion	Final N
Australia	Phone/email/fax recruit to online	747
Canada	Postal mail recruit to online/mail	2284
Germany	Postal mail	559
Netherlands	Postal mail	618
New Zealand	Phone/email/fax recruit to online	503
Norway	Postal mail	864
Sweden	Postal mail recruit to online/mail	2905
Switzerland	Postal mail recruit to online/phone (CATI)	1065
UK	Phone recruit to phone (CATI)/online	1001
US	Postal mail recruit to online/mail	1001

[2] The web mode was added for several countries (i.e., US, Canada, Switzerland, and Sweden) and for the Australia and New Zealand replaced the paper mode with the web mode. Web is comparable to mail because both are self-administered; moreover, adding web reduces non-response by age.

[3] Field time ranged from eight and a half to fourteen weeks.

TABLE 2: Field Period Per country

	Field Start Date	Field End Date
Australia	3/3/2015	6/9/2015
Canada	3/5/2015	6/5/2015
Germany	3/11/2015	5/22/2015
New Zealand	3/3/2015	5/26/2015
Netherlands	3/5/2015	5/18/2015
Norway	3/10/2015	5/29/2015
Sweden	3/12/2015	5/15/2015
Switzerland	3/19/2015	5/18/2015
United Kingdom	3/5/2015	6/7/2015
United States	3/2/2015	6/8/2015

A few countries included an additional set of questions specific to each country. SSRS worked with each country partner in designing questions that would better suit their data collection requirements by providing feedback on structure, wording, length and overall design.

SSRS created a master Web/CATI questionnaire for online and telephone administration and a preferred paper survey format.[4] The Web/CATI questionnaire included programmer and interviewer instructions that were to be used in the various modes. The Web/CATI questionnaire contained all country-specific introductions, questions, and instructions for countries that offered the survey in web and telephone formats. A preferred paper template was developed based on best practices in paper survey design aimed at promoting respondent completion by making the survey more user friendly, easy to understand, and consistent in format. SSRS provided a preferred translated formatted questionnaire for all countries using a paper survey mode. Each of the countries adapted the paper survey format, as needed, based on their survey administration requirements.[5]

Prior to the field period, SSRS developed a set of instructions for processing paper surveys. While the project team anticipated that most providers would follow instructions and completed the survey correctly, SSRS's standard of practice is to provide guidelines for editing and coding completed paper surveys. These procedures were finalized in consultation with the Fund and provided to all partners/vendors that were processing paper

[4] For most countries where data were collected online, the "www.internationaldoctorsurvey" domain name across was used. The top-level domains were differentiated as follows: Canada used (.ca), NZ (.org.nz), the UK (.uk), and the US (.org or .com). For Australia the www.internationaldoctorsurvey-au.org domain was selected. Sweden and Switzerland elected to use the www.vardanalys.se/IHP and https://survey.mis-trend.ch/IHP15 web domains, respectively.

[5] MIS Trend (Sweden) developed a paper instrument that was similar to the format used for the US and Canada (i.e., with slightly modified skip patterns and section separation formatting). Moderate changes (i.e., changed scale layouts, separation between questions, use of bolding, etc.) for the paper instruments used in Germany and the Netherlands. Germany, The Netherlands and Sweden paper instruments all remained eight pages. The Norwegian Knowledge Center made the most changes since it was necessary to condense the survey into four pages (e.g., scale layouts were modified, separations between questions were trimmed, text size was reduced, etc.).

surveys. These guidelines are provided in the Appendix.[6] Examples of information communicated in this memo include instructions regarding: (1) processing of data when skip patterns were not followed; (2) write in responses of "Don't know," "Not sure," and "Refused" (3) processing of multiple response for single-response questions.[7]

SSRS provided reporting data and disposition reporting templates to each of its survey-fielding partners. On a weekly basis, SSRS reviewed the status of data collection and provided feedback regarding the distribution of completes, field progress, and dispositions. Based on this feedback, SSRS was able to monitor sample productivity, track quotas and deadlines, and provide guidance on how to best handle other fielding aspects.

Throughout the field period, SSRS provided the Fund with bi-weekly updates of 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 mode of interview by gender, age, region, and language of interview (where applicable). Along with the bi-weekly data reports, SSRS reported on any field-related concerns via conference calls.

SSRS developed a standardized data map to be utilized by all the international partners when structuring their data in ASCII format. The back-end programmer created a program consisting of instructions derived from the skip patterns designated on the data map and editing and coding memos that were shared with each survey-fielding partner. The program confirmed that data were consistent with the definitions of the preset codes and ranges and matched the appropriate bases of all questions. By the end of field, once the integrated data were compiled, an independent checking of all variables was carried out to ensure that all variables were accurately constructed, had the correct number of cases, and were coded according to specifications provided. Frequencies and marginals were also run against clean data and reviewed as a further verification of valid codes and skip patterns.

For the online program, SSRS and its survey partners created a variable that calculated a respondent's completion rate. The calculation was based on the following formula:

[6] Letters and the other mailings will be identified listed in the Appendix, along with this memo and included in a zip file to be provided to all partners.

[7] Prior to the field period, SSRS and the Fund discussed the likelihood Q.18 ("How do you usually get [information needed to continue managing patients who have been discharged from the hospital?") would generate multiple response options, based on feedback from pretests conducted in several countries. Given the relatively large number of multiple responses provided to this question, SSRS added a created variable for Q.18 based on a hierarchy developed by the Fund and SSRS.

$$\frac{\text{Total Questions Asked} - \text{Total Questions Skipped}}{\text{Total Questions Asked}}$$

The same calculation was done for all mail- or online-based completed interviews at the end of field. Twenty-two respondents who completed 50% or less of the survey were removed from the final data: Canada (n=7), Germany (n=3), Sweden (n=2), Switzerland (n=4), and the US (n=6).

Data from each country were weighted to ensure the final outcome was representative of the primary care physician population. The weighting procedure accounted for the sample design and probability of selection, as needed, as well as differential non-response across known population parameters (e.g., age, gender, and region). As much as possible, the weighting procedure replicated the 2012 weighting protocol.[8]

Efforts were made to release sample in batches/waves to allow for oversampling, as needed, of specific geographies, and 'work' the sample throughout the field period in order to ensure that the final sample of completed interviews would be representative of both those who respond more quickly and those who require additional contacts (via phone, email, or mailings) to complete the survey. The response rates for this study were calculated using AAPOR's RR3 are provided below in Table 3.

TABLE 3: Response Rates by Country

	Response Rate
Australia	25.1%
Canada	31.7%
Germany	18.7%
Netherlands	40.6%
New Zealand	27.7%
Norway	44.4%
Sweden	46.5%
Switzerland	39.0%
UK	39.4%
US	30.9%

The report is organized into five sections. The project Overview is provided in the first section; in the second section Survey Procedures for each country are outlined. The third section provides information on Sample Design and Response Rate for each country. The final sections describe, weighting procedures, and project deliverables.

[8] Notably, data for Sweden were not weighted in IHP 2012; for 2015, these data have been weighted by age, gender, and region.

SURVEY PROCEDURES

Australia and New Zealand

SSRS's fielding partner, The Minter Group (Minter), fielded the survey in Australia and New Zealand. The survey was in field from March 3 – June 9, 2015 for Australia, and from March 3 – May 26, 2015 for New Zealand. Prior to fielding, the Bureau of Health Information contracted with SSRS to complete an oversample of interviews in New South Wales, with the goal of completing at least 400 interviews in that province.

Prior to the field period, SSRS programmed the study into SSRS's Web Interviewing system for online data collection in Australia and New Zealand. For consistency purposes across countries, the web domains used in Australia and New Zealand were www.internationaldoctorsurvey.org.nz and www.internationaldoctorsurvey-au.org, respectively. 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 country-specific language inserts were working properly.

Pretest interviews were conducted in Australian and New Zealand in late February, 2015. Overall, the instrument worked quite well and respondents seemed to be engaged in the interview. Minter conducted 10 telephone interviews in Australia and 10 telephone interviews in New Zealand. Fieldwork managers confirmed that all interviewed respondents were comfortable talking about their health experiences. They reported, however, that it was challenging to speak to physicians on the telephone, since they are most often consulting/meeting with patients. Taking this feedback into consideration, and upon consultation with Minter and the Fund, midway through the field period it was decided that in addition to the phone recruit, physicians would also be recruited by email and fax.

During the field period, physicians were contacted in a twostep process: The first step involved screening and inviting respondents (via the phone, email or fax) to participate in the study. Once doctors agreed to participate, the second step consisted of sharing a confirmation letter with a link to the online survey via email. The screener was used to identify whether respondents were interested in participating or not, and to screen-out primary care doctors not involved in direct patient care. Up to three reminders were attempted with physicians who had not responded. To encourage participation an endorsement letter[9] was shared with respondents and PCPs were offered an incentive of AUS$50.

[9] The Royal Australian College of General Practitioners provided endorsement for Australia, and the Royal New Zealand College of General Practitioners did so for New Zealand. Copies of these letters are included in the Appendix.

Prior to the beginning of fieldwork random data were generated for Australia to confirm that skip patterns were working correctly. Data were checked throughout the field period to confirm that skip patterns were correctly followed.

The tables below show final counts for Australia and New Zealand by gender, age, and region.

TABLE 4: Australia Final Counts – Gender by Age

GENDER / AGE	TOTAL	Gender / Age (%)
Male / Under 35	43	6%
Male / 35-44	122	16%
Male / 45-54	112	15%
Male / 55-64	117	16%
Male / 65 or older	35	5%
Male total	**429**	**57%**
Female / Under 35	67	9%
Female / 35-44	95	13%
Female / 45-54	83	11%
Female / 55-64	62	8%
Female / 65 or older	11	1%
Female Total	**318**	**43%**
TOTAL	**747**	

TABLE 5: Australia Final Counts – Region

REGION	TOTAL	Region (%)	TARGET	% of target completed
New South Wales (NSW)	401[10]	54%	**400**	**100%**
Australian Capital Territory (ACT)	12	2%	**11**	**109%**
Victoria (VIC)	105	14%	**107**	**98%**
Queensland (QLD)	111	15%	**112**	**99%**
South Australia (SA)	42	6%	**41**	**102%**
Western Australia (WA)	54	7%	**52**	**104%**
Tasmania (TAS)	13	2%	**12**	**108%**
Northern Territory (NT)	9	1%	**8**	**113%**
TOTAL	**747**	**100%**	**743**	**101%**

[10] 243 interviews correspond to the oversample for the Bureau of Health Information of New South Wales.

TABLE 6: New Zealand Final Counts – Gender by Age

GENDER / AGE	TOTAL	Gender / Age (%)
Male / Under 35	25	5%
Male / 35-44	45	9%
Male / 45-54	70	14%
Male / 55-64	86	17%
Male / 65 or older	23	5%
Male total	**249**	**50%**
Female / Under 35	47	9%
Female / 35-44	73	15%
Female / 45-54	79	16%
Female / 55-64	50	10%
Female / 65 or older	5	1%
Female Total	**254**	**50%**
TOTAL	**503**	

TABLE 7: New Zealand Final Counts – Region

REGION	TOTAL	Region (%)	TARGET	% of target completed
Northern/Auckland	178	35%	**181**	**98%**
Central North Island	83	17%	**90**	**92%**
Lower North Island	108	21%	**99**	**109%**
South Island	134	27%	**130**	**103%**
TOTAL	**503**	**100%**	**500**	**101%**

Canada

SSRS fielded the survey in Canada. The survey was in field from March 5 – June 5, 2015. Respondents were recruited via postal mail and invited to participate in a paper-copy or online version of the survey. Prior to the field period, SSRS programmed the study into SSRS's Computer-assisted online interviewing system (webCATI) for data collection in Canada and the US. For consistency purposes across countries, the web domain used in Canada was www.internationaldoctorsurvey.ca. Additionally, early on in the field period, a process was implement where Canadian respondents who by mistake typed the ".com" or ".org" top-level domains (which were the US top-level domains) were automatically re-directed to the ".ca" version. 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. SSRS also designed a paper survey to be used in Canada following best practices to maximize usability and respondent completion.

Once the 2015 instrument was finalized in early January 2015, SSRS identified questions that were (1) new (2) the same in 2012, and (3) modified from the 2012 instrument. A master excel spreadsheet was created that

contained the 2015, 2012 and 2009 English verbiage, the 2012 and 2009 French Canadian translations, and instructions for the translator to ensure a previous year's translation remained accurate, modify a previous instrument's translation or translate from scratch. New and modified questions were translated into Canadian French as needed. The SSRS team then sent translations to the French country partners to ensure that the translations were accurate and user friendly. Modifications were made based on country partner feedback.

Six pretest interviews were completed in Canada between February 17 and 18, 2015. Three were conducted using the web program and three using the paper survey instrument. Every effort was made to complete interviews among as representative of a population as possible.[11] All Canadian pretests were conducted in English. Respondents were asked to provide feedback on the instrument/program, invitation letter, reminder letter, and publication list. Upon completion of the pretest interviews, SSRS provided a memo of the pretest findings to the Fund and also provided feedback to the Canadian partners. No changes were made based on the Canadian pretest findings.

Prior to the beginning of fieldwork random data were generated for Canada to confirm that skip patterns were working correctly. Data were checked throughout the field period to confirm that skip patterns were correctly followed.

To encourage participation, primary care doctors were mailed an endorsement letter tailored for each province[12], an incentive check of $25 (included with the first paper questionnaire), and a list of publications based on previous International Health Policy surveys (See Table 8 below). Additionally, to maximize response rates and based on pretest feedback, similar to IHP 2012, SSRS implemented a strategy that allowed respondents in Canada to provide their email address so that highlights on the survey results can be shared when they are available.

Sample was released in three waves. Waves 1 and 2 followed the same format. Wave 2a followed a slightly different format (noted below). Wave 2a was implemented as an additional effort to obtain the targeted number of completed interviews for each province. Doctors in Canada received an advance invitation including the web link and up to seven additional contacts/reminders during the field (i.e., two paper questionnaires, two post cards

[11] Pretest interviews were completed with 5 males and one female; two from Ontario, one from Quebec, one from New Foundland/Labrador, one from Manitoba, and one from British Columbia.

[12] The Canadian Institute for Health Information (CIHI) collaborated with Canada Health Infoway (Infoway) and the Canadian Institutes for Health Research (CIHR) Institute of Health Services and Policy Research and provided endorsement in letters for all provinces. Additionally, Health Quality Ontario and the Quebec Health and Welfare Commissioner provided endorsement for the Ontario and Quebec provinces, respectively.

three email reminders). Detailed specifications for each contact/wave are outlined below.[13] Email reminders were sent to the 67% of the sample for which email addresses could be appended by the sample provider (KMLists).

TABLE 8: Canada Contact Schedule for Waves 1 & 2

Contact	Wave 1	Wave 2	Quebec	Ontario	New Brunswick	All Other Provinces
1	03/05/15	04/14/15	•Cover letter with web link •List of The Commonwealth Fund's publications based on previous IHP studies • Quebec-specific Endorsement letter	•Cover letter with web link •List of The Commonwealth Fund's publications based on previous IHP studies •Ontario-specific Endorsement letter	•Cover letter with web link •List of The Commonwealth Fund's publications based on previous IHP studies •All other provinces Endorsement letter	•Cover letter with web link •List of The Commonwealth Fund's publications based on previous IHP studies •All other provinces Endorsement letter
2	03/10/15	04/17/15	First paper copy mailing •Cover letter with web link •$25 check •Postage-paid reply envelope •8-page paper questionnaire	First paper copy mailing •Cover letter with web link •$25 check •Postage-paid reply envelope •8-page paper questionnaire	First paper copy mailing •Cover letter with web link •$25 check •Postage-paid reply envelope •8-page paper questionnaire	First paper copy mailing •Cover letter with web link •$25 check •Postage-paid reply envelope •8-page paper questionnaire
3	03/12/15	04/27/15	•First Email	•First Email	•First Email	•First Email
4	03/16/15	04/24/15	•First postcard	•First postcard	•First postcard	•First postcard
5	03/19/15	04/29/15	Second paper copy mailing •Cover letter with web link •Postage-paid reply envelope •8-page paper questionnaire	Second paper copy mailing •Cover letter with web link •Postage-paid reply envelope •8-page paper questionnaire	Second paper copy mailing •Cover letter with web link •Postage-paid reply envelope •8-page paper questionnaire	Second paper copy mailing •Cover letter with web link •Postage-paid reply envelope •8-page paper questionnaire
6	03/24/15	05/11/15	•Second Email	•Second Email	•Second Email	•Second Email
7	03/26/15	05/07/15	•Second postcard	•Second postcard	•Second postcard	•Second postcard
8	05/11/15	05/11/15	•Third Email	•Third Email	•Third Email	•Third Email

[13] The endorsement letter was shared with all respondents in English and Canadian-French. Respondents from New Brunswick and Quebec received both English and Canadian-French versions of the cover letter and paper instrument, while respondents in all other provinces received only English versions of these documents. Postcards and emails were sent to respondents in New Brunswick and Quebec in either English or Canadian-French based upon their language preference (as specified in the sample). Respondents in all other provinces received the postcards and emails in English. Respondents across all provinces had the option to complete the survey in English or Canadian-French online.

TABLE 9: Canada Contact Schedule for Wave 2a

Contact	Wave 2a	Quebec	Ontario	New Brunswick	All Other Provinces
1	04/17/15	•Cover letter with web link •List of The Commonwealth Fund's publications based on previous IHP studies •Quebec-specific Endorsement letter	•Cover letter with web link •List of The Commonwealth Fund's publications based on previous IHP studies; •Ontario-specific Endorsement letter	•Cover letter with web link •List of The Commonwealth Fund's publications based on previous IHP studies •All other provinces Endorsement letter	•Cover letter with web link •List of The Commonwealth Fund's publications based on previous IHP studies •All other provinces Endorsement letter
2	04/21/15	First paper copy mailing •Cover letter with web link •$25 check •Postage-paid reply envelope •8-page paper questionnaire	First paper copy mailing •Cover letter with web link •$25 check •Postage-paid reply envelope •8-page paper questionnaire	First paper copy mailing •Cover letter with web link •$25 check •Postage-paid reply envelope •8-page paper questionnaire	First paper copy mailing •Cover letter with web link •$25 check •Postage-paid reply envelope •8-page paper questionnaire
3	04/27/15	•First Email	•First Email	•First Email	•First Email
4	04/24/15	•First postcard	•First postcard	•First postcard	•First postcard
5	04/29/15	Second paper copy mailing •Cover letter with web link •Postage-paid reply envelope •8-page paper questionnaire	Second paper copy mailing •Cover letter with web link •Postage-paid reply envelope •8-page paper questionnaire	Second paper copy mailing •Cover letter with web link •Postage-paid reply envelope •8-page paper questionnaire	Second paper copy mailing •Cover letter with web link •Postage-paid reply envelope •8-page paper questionnaire
6	05/07/15	•Second postcard	•Second postcard	•Second postcard	•Second postcard
7	05/11/15	•Second Email	•Second Email	•Second Email	•Second Email

SSRS maintained a master file of contacts initiated by Canadian respondents throughout the field period. This file included information about the reason behind the communication established with the respondent and the decisions made to proactively address the issue raised. In addition, hand written comments in paper surveys were saved into an excel file. SSRS compiled these comments and created a memo highlighting this respondent feedback.

Some duplicate surveys were removed for cases where respondents completed two or more surveys (i.e., both web and paper or two paper surveys).[14] For duplicate cases, the following rules were followed to select the cases that were kept in the final data file.

1) Cases with the highest completion response rate were kept regardless of the survey mode.
2) If duplicate cases for a particular respondent had identical questionnaire completion rates and the mode of completion cases was different (i.e., mail and online), the online case was kept.
3) The case with the earliest date of completion was selected for duplicate cases with identical completion response rates and mode of completion (e.g., two mail-based interviews from a single respondent).

The tables below show final counts per country by gender, age, region, and language of interview for interviews completed in Canada.

TABLE 10: Canada Final Counts – Gender by Age

GENDER / AGE	Web	Gender / Age (%)	Mail	Gender / Age (%)	Total	Gender / Age (%)
Male / Under 35	69	9%	54	4%	123	5%
Male / 35-44	91	12%	130	9%	221	10%
Male / 45-54	96	12%	175	12%	271	12%
Male / 55-64	112	14%	233	16%	345	15%
Male / 65 or older	32	4%	198	13%	230	10%
Male total	**400**	**52%**	**790**	**53%**	**1190**	**52%**
Female / Under 35	119	15%	109	7%	228	10%
Female / 35-44	133	17%	179	12%	312	14%
Female / 45-54	68	9%	226	15%	294	13%
Female / 55-64	44	6%	148	10%	192	8%
Female / 65 or older	12	2%	50	3%	62	3%
Female Total	**376**	**48%**	**712**	**47%**	**1088**	**48%**
TOTAL	**776**		**1502**		**2278**[15]	

TABLE 11: Canada Final Counts – Language

LANGUAGE	Web	Language (%)	Mail	Language (%)	Total	Language (%)
ENGLISH	621	80%	1227	81%	1848	81%
FRENCH	155	20%	281	19%	436	19%
TOTAL	**776**		**1508**		**2284**	100%

[14] The Fund and the Canadian partners also elected to remove five additional completed interviews from the Canadian data based on comments made by physicians who were not providing primary care. For example one respondent mentioned working in the emergency room. These comments rendered by respondents were assessed in conjunction with the questionnaire completion rate in a case-by-case basis prior to deciding whether to remove a given interview or not.

[15] Gender by Age may not add to total completes due to respondents skipping these two questions.

TABLE 12: Canada Final Counts – Region

REGION	WEB	Region (%)	MAIL	Region (%)	TOTAL	Region (%)	TARGET	% of target completed
Alberta	67	9%	112	7%	179	8%	**164**	**109%**
British Columbia	64	8%	132	9%	196	9%	**165**	**119%**
Manitoba	65	8%	118	8%	183	8%	**150**	**122%**
New Brunswick	60	8%	120	8%	180	8%	**144**	**125%**
Newfoundland	42	5%	124	8%	166	7%	**136**	**122%**
Nova Scotia	45	6%	128	8%	173	8%	**150**	**115%**
Ontario	209	27%	349	23%	558	24%	**500**	**112%**
Quebec	156	20%	299	20%	455	20%	**417**	**109%**
Saskatchewan	66	9%	123	8%	189	8%	**148**	**128%**
Other (NT, NU, PE, YT)	2	0%	3	0%	5	0%	**3**	**167%**
TOTAL	**776**	**100%**	**1508**	**100%**	**2284**	**100%**	**1977**	**116%**

Germany

BQS Institut für Qualität & Patientensicherheit (BQS) conducted the survey in Germany. The survey was in field from March 11 – May 22, 2015.

Once the 2015 instrument was finalized in early January 2015, SSRS identified questions that were (1) new (2) the same in 2012, and (3) modified from the 2012 instrument. A master excel spreadsheet was created that contained the 2015, 2012 and 2009 English verbiage, the 2012 and 2009 German translations, and instructions for the translator to ensure a previous year's translation remained accurate, modify a previous instrument's translation or translate from scratch. BQS finalized the translations. SSRS provided a translated, formatted paper survey instrument for Germany. BQS adapted the formatted paper survey as needed for fielding and data processing needs for Germany. Pretest interviews were not conducted in Germany.

Physicians were recruited via postal mail and invited to participate in a paper-copy version of the survey. Non-responders were sent a reminder letter and a second paper questionnaire. To encourage participation, PCPs were offered an incentive of €20 in the form of an Amazon, Douglas or Fleurop voucher upon completion of the survey.

TABLE 13: Germany Contact Schedule

Contact	Date	Germany
1	03/11/15	8-page paper questionnaire and cover letter
2	04/15/15	8-page paper questionnaire and reminder letter

The tables below show final counts per country by gender, age, and region for Germany.

TABLE 14: Germany Final Counts – Gender by Age

GENDER / AGE	TOTAL	Gender / Age (%)
Male / Under 35	4	1%
Male / 35-44	27	5%
Male / 45-54	96	17%
Male / 55-64	135	24%
Male / 65 or older	53	10%
Male total	**315**	**57%**
Female / Under 35	1	0%
Female / 35-44	46	8%
Female / 45-54	97	17%
Female / 55-64	87	16%
Female / 65 or older	11	2%
Female Total	**242**	**43%**
TOTAL	**557**[16]	

TABLE 15: Germany Final Counts – Specialty Type

SPECIALTY	TOTAL	Specialty (%)
General Practitioner	449	80%
Pediatrician	68	12%
refused	42	8%
TOTAL	**559**	**100%**

TABLE 16: Germany Final Counts – Region

REGION	TOTAL	Region (%)
Schleswig-Holstein	17	3%
Hamburg	14	3%
Bremen	6	1%
Niedersachsen	48	9%
Nordrhein-Westfalen	94	17%
Rheinland-Pfalz	23	4%
Saarland	7	1%
Hessen	38	7%
Baden-Württemberg	76	14%
Bayern	75	13%
Berlin	26	5%
Mecklenburg-Vorpommern	9	2%
Brandenburg	16	3%
Sachsen-Anhalt	21	4%
Thüringen	16	3%
Sachsen	31	6%
Other		0%
Refused	42	8%
TOTAL	**559**	**100%**

[16] Gender by Age may not add to total completes due to respondents skipping these two questions.

The Netherlands

The Netherlands conducted the fieldwork via the Scientific Institute for Quality of Healthcare (IQ healthcare), part of the Radboud university medical center. The survey was in field from March 5 – May 18, 2015.

Once the 2015 instrument was finalized in early January 2015, SSRS identified questions that were (1) new (2) the same in 2012, and (3) modified from the 2012 instrument. A master excel spreadsheet was created that contained the 2015, 2012 and 2009 English verbiage, the 2012 and 2009 Dutch translations, and instructions for the translator to ensure a previous year's translation remained accurate, modify a previous instrument's translation or translate from scratch. IQ Healthcare finalized the translations. SSRS provided a translated, formatted paper survey instrument for the Netherlands. IQ Healthcare adapted the formatted paper survey as needed for fielding and data processing needs for the Netherlands.

Before starting the field, IQ Healthcare pretested the Dutch version of the instrument with three primary care doctors using a cognitive validation format. The interviews were conducted on February 20 and 25 and the IQ Healthcare team did not report any problems with the instrument.[17]

Primary care doctors were recruited via postal mail and invited to participate in a paper-copy version of the survey. Non-responders were sent up to three reminder letters, along with the paper questionnaire. No financial incentive was offered in the Netherlands.

TABLE 17: The Netherlands Contact Schedule

Contact	Wave 1	Wave 2	Netherlands
1	03/05/15	03/28/15	•8-page paper questionnaire and cover letter
2	03/28/15	04/06/15	•First reminder attempt: 8-page paper questionnaire and reminder letter
3	04/06/15	04/20/15	•Second reminder attempt: 8-page paper questionnaire and reminder letter
4	04/20/15	Not Applicable	•Third reminder attempt: 8-page paper questionnaire and reminder letter

Data entry was completing using IQ Healthcare's software, Teleform, which automatically 'reads' completed surveys. Ambiguous data were reviewed and verified by a research-assistant.

The tables below show final counts by gender and age for the Netherlands.

[17] The IQ Healthcare team reported that the pretest was helpful, however, in developing a better translation for Q12.

TABLE 18: The Netherlands Final Counts – Gender by Age

GENDER / AGE	TOTAL	Gender / Age (%)
Male / Under 35	6	1%
Male / 35-44	59	10%
Male / 45-54	96	16%
Male / 55-64	150	25%
Male / 65 or older	13	2%
Male total	**324**	**54%**
Female / Under 35	24	4%
Female / 35-44	109	18%
Female / 45-54	92	15%
Female / 55-64	50	8%
Female / 65 or older	1	0%
Female Total	**276**	**46%**
TOTAL	**600**[18]	

Norway

The Norwegian Knowledge Centre for the Health Services conducted the fieldwork in Norway. The survey was in field from March 10 – May 29, 2015.

Once the 2015 instrument was finalized in early January 2015, SSRS identified questions that were (1) new (2) the same in 2012, and (3) modified from the 2012 instrument. A master excel spreadsheet was created that contained the 2015, 2012 and 2009 English verbiage, the 2012 and 2009 Norwegian translations, and instructions for the translator to ensure a previous year's translation remained accurate, modify a previous instrument's translation or translate from scratch. The Norwegian Knowledge Centre finalized the translations. SSRS provided a translated, formatted paper survey instrument for Norway. The Norwegian Knowledge Centre for the Health Services adapted the formatted paper survey as needed for fielding and data processing needs for Norway.[19] Pretest interviews were not conducted in Norway.

Primary care doctors were recruited via postal mail and invited to complete a paper-copy version of the survey. Non-responders were sent up to three reminder letters, along with the paper questionnaire. No financial incentive was offered in Norway.

[18] Gender by Age may not add to total completes due to respondents skipping these two questions.
[19] Due to space constraints, the Norwegian questionnaire was condensed into four pages from the original eight page survey.

TABLE 19: Norway Contact Schedule

Contact	Date	Norway
1	03/10/15	•Cover letter •4-page paper questionnaire •Postage-paid reply envelope
2	03/26/15	•Reminder letter •4-page paper questionnaire •Postage-paid reply envelope
3	04/15/15	• Reminder letter •4-page paper questionnaire •Postage-paid reply envelope
4	04/28/15	• Reminder letter •4-page paper questionnaire •Postage-paid reply envelope

Completed questionnaires were scanned, using Eyes and Hands software. The scanning process includes 4 steps:

- Step 1 - Scanning of the questionnaires
- Step2 - Internal interpretation
- Step3 - Verification of the data
- Step 4 - Transferring of the data to the data file.

Verification of the data (Step 3) was done according to instructions provided by SSRS in the editing/coding memo (See Appendix 1). Responses that were difficult to interpret and/or required handwritten numbers were checked against the answers in the original questionnaire. In addition to the controls in the scanning procedure, the data were checked in SPSS, and inconsistent cases were checked against the original form.

The tables below show final counts by gender, age, and region for Norway.

TABLE 20: Norway Final Counts – Gender by Age

GENDER / AGE	TOTAL	Gender / Age (%)
Male / Under 35	54	6%
Male / 35-44	120	14%
Male / 45-54	100	12%
Male / 55-64	176	20%
Male / 65 or older	48	6%
Male total	**498**	**58%**
Female / Under 35	52	6%
Female / 35-44	133	15%
Female / 45-54	95	11%
Female / 55-64	73	8%
Female / 65 or older	9	1%
Female Total	**362**	**42%**
TOTAL	**860**[20]	

TABLE 21: Norway Final Counts – Region

REGION	TOTAL	Region (%)
Østfold	41	5%
Akershus	75	9%
Oslo	85	10%
Hedmark	40	5%
Oppland	42	5%
Buskerud	40	5%
Vestfold	43	5%
Telemark	40	5%
Aust-Agder	27	3%
Vest-Agder	32	4%
Rogaland	69	8%
Hordaland	84	10%
Sogn og Fjordane	20	2%
Møre og Romsdal	39	5%
Sør-Trøndelag	63	7%
Nord-Trøndelag	22	3%
Nordland	43	5%
Troms	38	4%
Finnmark-Finnmárku	21	2%
TOTAL	**864**	**100%**

Sweden

Sweden contracted with Institutet för kvalitetsindikatorer AB (Indikator) to manage the data collection process and field the instrument in Sweden. The survey was in field from March 12 – May 15, 2015.

[20] Gender by Age may not add to total completes due to respondents skipping these two questions.

Once the 2015 instrument was finalized in early January 2015, SSRS identified questions that were (1) new (2) the same in 2012, and (3) modified from the 2012 instrument. A master excel spreadsheet was created that contained the 2015, 2012 and 2009 English verbiage, the 2012 and 2009 Swedish translations, and instructions for the translator to ensure a previous year's translation remained accurate, modify a previous instrument's translation or translate from scratch. SSRS provided a translated, formatted paper survey instrument for Sweden. Indikator adapted the formatted paper survey as needed for fielding and data processing needs for Sweden. In addition to the translated paper survey instrument, SSRS created a master Web/CATI questionnaire to facilitate online administration in Sweden.

Indikator programmed the survey for online data collection. In an effort to keep data collection consistent as possible across countries, SSRS provided Indikator with the final US program to review before they programmed the Swedish program. Sweden elected to use the www.vardanalys.se/IHP web domain. SSRS encouraged Indikator to make their web program look and function as similar as possible to the US program. Extensive checking of the program 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 also tested Swedish version of the instrument. In general, consistent with their country-specific paper instrument, Indikator designed their web program in keeping with best practices for online/multi-mode surveys; the final program was similar but not identical to the US and Canadian web instruments. Pretest interviews were not conducted in Sweden.

PCPs were recruited via postal mail and invited to participate in a paper-copy or online version of the survey. Doctors in Sweden received a pre-notification letter including the web link and up to three additional contacts/reminders during the field (i.e., two reminder letters along with paper questionnaires, and a postcard). No financial incentive was offered in Sweden.

TABLE 22: Sweden Contact Schedule

Contact	Date	Sweden
1	03/12/15	•Prenotice letter •Cover/advance letter with web link
2	03/20/15	•Reminder letter #1 with web link •8-page paper questionnaire •Postage-paid reply envelope
3	04/02/15	•Postcard with web link
4	04/16/15	• Reminder letter # 2 with web link •8-page paper questionnaire •Postage-paid reply envelope

In Sweden, hand written comments in paper surveys were compiled and a summary was sent it along to SSRS. SSRS compiled these comments and created a memo highlighting this respondent feedback.

Data collection for web and paper questionnaires was performed using separate systems. Paper questionnaires were registered upon return, scanned and verified. If more than one paper questionnaire had been submitted by the same respondent, the one with the highest number of answered questions was saved in the system. Web questionnaires were merged with data from paper questionnaires once per week. If respondents completed both on modes, the web version was prioritized.

The data processing procedure was outlined and tested in connection to the delivery of the interim data in April 2015. When the field period closed all remaining data from the paper questionnaires were scanned and verified.[21] The following procedures were performed:

1) Blank questionnaires were removed
2) Data from the paper and web questionnaires were merged into a single datafile
3) A merged dataset in CSV-format was exported to re-column per SSRS's desired layout
4) Data were processed using a winforms client server application that was created solely for this survey and was based on the conditions in the data map forwarded by SSRS.

The tables below show final counts for Sweden for gender, age and region.

[21] After the final data were delivered, an update was made concerning respondents with missing age and gender information. In total there were 10 respondents missing age and one respondent missing gender. These were manually controlled against the Swedish Population Database. Two cases that could not be updated corresponded to data from respondents not listed in the Swedish Population Database. After this update a new final count report and dataset was delivered to SSRS.

TABLE 23: Sweden Final Counts – Gender by Age

GENDER / AGE	MAIL	Gender / Age (%)	WEB	Gender / Age (%)	TOTAL	Gender / Age (%)
Male / Under 35	57	3%	37	4%	94	3%
Male / 35-44	142	7%	140	15%	282	10%
Male / 45-54	159	8%	129	14%	288	10%
Male / 55-64	294	15%	138	15%	432	15%
Male / 65 or older	193	10%	61	6%	254	9%
Male total	**845**	**43%**	**505**	**53%**	**1350**	**47%**
Female / Under 35	105	5%	69	7%	174	6%
Female / 35-44	322	16%	139	15%	461	16%
Female / 45-54	238	12%	118	12%	356	12%
Female / 55-64	330	17%	89	9%	419	14%
Female / 65 or older	114	6%	29	3%	143	5%
Female Total	**1109**	**57%**	**444**	**47%**	**1553**	**53%**
TOTAL	**1954**		**949**		**2903**[22]	

TABLE 24: Sweden Final Counts – Region

REGION	MAIL	Region (%)	WEB	Region (%)	TOTAL	Region (%)
Stockholm	418	21%	224	24%	642	22%
Uppsala	74	4%	32	3%	106	4%
Södermanland	48	2%	27	3%	75	3%
Östergötland	95	5%	50	5%	145	5%
Jönköping	70	4%	35	4%	105	4%
Kronoberg	44	2%	24	3%	68	2%
Kalmar	47	2%	21	2%	68	2%
Gotland	15	1%	3	0%	18	1%
Blekinge	23	1%	17	2%	40	1%
Skåne	285	15%	133	14%	418	14%
Halland	65	3%	33	3%	98	3%
Västra Götaland	323	17%	144	15%	467	16%
Värmland	49	3%	23	2%	72	2%
Örebro	70	4%	21	2%	91	3%
Västmanland	38	2%	19	2%	57	2%
Dalarna	56	3%	29	3%	85	3%
Gävleborg	63	3%	34	4%	97	3%
Västernorrland	39	2%	24	3%	63	2%
Jämtland	40	2%	10	1%	50	2%
Västerbotten	43	2%	27	3%	70	2%
Norrbotten	50	3%	20	2%	70	2%
TOTAL	**1955**	100%	**950**	100%	**2905**	**100%**

[22] Gender by Age may not add to total completes due to respondents skipping these two questions.

Switzerland

Switzerland contracted with M.I.S. Trend S.A. to field the survey in Switzerland. The survey was in field from March 19 – May 18, 2015.

Once the 2015 instrument was finalized in early January 2015, SSRS identified questions that were (1) new (2) the same in 2012, and (3) modified from the 2012 instrument. A master excel spreadsheet was created that contained the 2015, 2012 and 2009 English verbiage, the 2012 and 2009 Swiss translations (German, French and Italian), and instructions for the translator to ensure a previous year's translation remained accurate, modify a previous instrument's translation or translate from scratch. SSRS created a master Web/CATI questionnaire to facilitate online and telephone administration in Switzerland.

M.I.S. Trend programmed the survey for online data collection. Switzerland elected to use the https://survey.mis-trend.ch/IHP15 web domain. In an effort to keep data collection consistent as possible across countries, SSRS provided M.I.S. Trend with the final US program to review before they programmed the Swiss program. SSRS encouraged M.I.S. Trend to make their web program look and function as similar as possible to the US program. Extensive checking of the program 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 all three (German, French and Italian) Swiss versions of the instrument. M.I.S. Trend designed their web program in keeping with best practices for online/multi-mode surveys; the final program was similar but not identical to the US and Canadian web instruments. Based on the program testing, M.I.S. Trend made minor adjustments to their program to make them as consistent as possible with the US and Canadian programs (e.g., the progress bar was removed from the Swiss program). Pretest interviews were not conducted in Switzerland.

M.I.S. Trend S.A's project manager carried out personal interviewer training. Two training sessions containing the following modules were conducted:

- Introduction (information on the specific survey project)
- Technical aspects
- The interview (definitions, how to code specific answers, etc.)
- Refusal avoidance strategies
- Training interviews, monitoring of fieldwork, response rates on linguistic region, sex, specialty, and urban vs. rural

Primary care doctors were recruited via postal mail and invited to participate in an online version of the survey. By April 22, any non respondents were attempted to be contacted on the phone using a CATI methodology.

TABLE 25: Switzerland Contact Schedule

Contact	Date	Switzerland
1	03/19/15	•Cover letter with web link
2	04/09/15	•Reminder letter with web link
3	04/22/15	•CATI calls start for any non-respondents

In an effort to boost response rate, Switzerland incorporated a CATI stage to survey fielding procedures. Phone calls to non-respondents to the online version of the questionnaire from the first two mailings were affected. 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. Additionally, a maximum of 15 call attempts during fieldwork were allowed.

To maximize response rates, similar to IHP 2012, M.I.S. Trend implemented a strategy that allowed respondents in Switzerland to provide their email address so that highlights on the survey results can be shared when they are available. No financial incentive was offered.

Data processing procedures involved (1) a careful check of the SPSS file to ascertain whether all variables noted in data map were filled in with the correct number of cases or not, (2) the recoding of text answers provided for SWI-6, a Switzerland-specific question, and (3) the export of the data into ASCII format.

The tables below show final counts for Switzerland for gender, age, region, and language of interview.

TABLE 26: Switzerland Final Counts – Gender by Age

GENDER / AGE	PHONE	Gender / Age (%)	WEB	Gender / Age (%)	Web/ Phone	Gender / Age (%)	TOTAL	Gender / Age (%)
Male / Under 35	2	2%	5	1%	0	0%	7	1%
Male / 35-44	5	4%	108	11%	0	0%	113	11%
Male / 45-54	14	12%	183	19%	0	0%	197	18%
Male / 55-64	40	35%	285	30%	3	75%	328	31%
Male / 65 or older	13	12%	89	9%	0	0%	102	10%
Male total	**74**	**65%**	**670**	**71%**	**3**	**75%**	**747**	**70%**
Female / Under 35	0	0%	10	1%	0	0%	10	1%
Female / 35-44	12	11%	115	12%	0	0%	127	12%
Female / 45-54	14	12%	93	10%	0	0%	107	10%
Female / 55-64	12	11%	52	5%	1	25%	65	6%
Female / 65 or older	1	1%	8	1%	0	0%	9	1%
Female Total	**39**	**35%**	**278**	**29%**	**1**	**25%**	**318**	**30%**
TOTAL	**113**		**948**		**4**		**1065**	

TABLE 27: Switzerland Final Counts – Language

LANGUAGE	PHONE	Language (%)	WEB	Language (%)	Web/Phone	Language (%)	TOTAL	Language (%)
German	45	40%	620	65%	2	50%	667	63%
French	50	44%	258	27%	2	50%	310	29%
Italian	18	16%	70	7%	0	0%	88	8%
TOTAL	**113**	**100%**	**948**	**100%**	**4**	**100%**	**1065**	**100%**

TABLE 28: Switzerland Final Counts – Region

LINGUISTIC REGION	PHONE	Linguistic Region (%)	WEB	Linguistic Region (%)	Web/ Phone	Linguistic Region (%)	TOTAL	Linguistic Region (%)
German	45	40%	596	63%	2	50%	643	60%
French	47	42%	267	28%	2	50%	316	30%
Italian	20	18%	84	9%	0	0%	104	10%
Rhaeto-Romansch	1	1%	1	0%	0	0%	2	0%
TOTAL	**113**	**100%**	**948**	**100%**	**4**	**100%**	**1065**	**100%**

The United Kingdom

SSRS's fielding partner, Adkins Research Group (Adkins), fielded the survey in the UK. Fieldwork in the UK was conducted by Adkins from their phone centers in Sutton Coldfield and Pembroke. The survey was in field from March 5 – June 7, 2015.

Adkins conducted six pretest interviews in the UK on March 5. Overall, the instrument worked quite well and respondents seemed to be engaged in the interview. Web respondents (n=3) indicated that the survey was easy to navigate, user friendly, and easy to understand and telephone respondents (n=3) were able to understand and respond to questions as they were asked. Interviewers did not experience any problems with transitions or specific questions. The new questions added for 2015 were well received and did not cause issues.

Prior to the field period, SSRS programmed the study into SSRS's Web Interviewing system for the UK data collection. For consistency purposes across countries, the web domain used in the UK was www.internationaldoctorsurvey.uk. Extensive checking of the program was conducted to assure that skip patterns followed the design of the questionnaire. The computer-assisted instrument was tested to ensure that all of the language inserts were working properly. Prior to the beginning of fieldwork random data were generated for the UK to confirm that skip patterns were working correctly. Data were checked throughout the field period to confirm that skip patterns were correctly followed.

For the UK, primary care doctors were recruited and screened via the phone and invited to participate in a phone or online version of the survey. In addition to identifying respondents who were willing to participate, the screener served to screen out PCPs who did not spend more than 50% of their time in direct patient care, who were not general practitioners, who refused to provide a current job title or who practiced in regions that were over quota. Respondents who qualified were invited to participate in the core instrument via the phone (at a time convenient for the respondent) or online. Respondents who preferred the online option were asked to provide their email address, which was then used to share the information about how to access the web link. To encourage participation, and endorsement letter was shared with respondents[23] and PCPs were offered an incentive of £30 upon completion of the survey. An additional £30 was offered to a sample size of 25 respondents in order to bolster additional completes in Scotland (N=10), Wales (N=10), and Northern Ireland (N=5). An average of three call attempts were made on active sample.

[23] The Health Foundation was provided endorsement for the UK.

The telephone version had a better completion rate, as respondents interested in completing the interview via telephone were able to complete the survey immediately, if desired. Online respondents required follow up efforts from the Adkins interviewing staff to get them complete the survey.

The tables below show final counts the UK for gender, age and region.

TABLE 29: UK Final Counts – Gender by Age

GENDER / AGE	PHONE	Gender / Age (%)	WEB	Gender / Age (%)	TOTAL	Gender / Age (%)
Male / Under 35	47	5%	5	5%	52	5%
Male / 35-44	142	16%	28	31%	170	17%
Male / 45-54	204	22%	18	20%	222	22%
Male / 55-64	182	20%	13	14%	195	19%
Male / 65 or older	36	4%	3	3%	39	4%
Male total	**611**	**67%**	**67**	**74%**	**678**	**68%**
Female / Under 35	58	6%	5	5%	63	6%
Female / 35-44	108	12%	9	10%	117	12%
Female / 45-54	73	8%	9	10%	82	8%
Female / 55-64	55	6%	1	1%	56	6%
Female / 65 or older	5	1%	0	0%	5	0%
Female Total	**299**	**33%**	**24**	**26%**	**323**	**32%**
TOTAL	**910**		**91**		**1001**	

TABLE 30: UK Final Counts – Region

REGION	PHONE	Region (%)	WEB	Region (%)	TOTAL	Region (%)	TARGET	% of target completed
England excluding London	417	46%	58	64%	475	47%	**475**	**100%**
London	181	20%	19	21%	200	20%	**200**	**100%**
Scotland	132	15%	4	4%	136	14%	**135**	**101%**
Wales	106	12%	4	4%	110	11%	**110**	**100%**
Northern Ireland	74	8%	6	7%	80	8%	**80**	**100%**
TOTAL	**910**	**100%**	**91**	**100%**	**1001**	**100%**	**1000**	**100%**

The United States

SSRS fielded the survey in the US. The survey was in field from March 2 – June 8, 2015. Respondents were recruited via postal mail and invited to participate in a paper-copy or online version of the survey. To encourage participation, primary care doctors were mailed an incentive check of $25 prior to them completing the survey. Prior to the field period, SSRS programmed the study into SSRS's Computer-assisted online interviewing system (webCATI) for data collection in Canada and the US. For consistency purposes across countries, the web domains used in the US were www.internationaldoctorsurvey.org or www.internationaldoctorsurvey.com; respondents were allowed to enter the .org or .com top-level domains but all the invitation materials displayed the .org

version. 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. SSRS also designed a paper survey to be used in the US following best practices to maximize usability and respondent completion.

Prior to the field period, SSRS programmed the study into SSRS's Web Interviewing system for US data collection. 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.

Once the instrument was finalized, a total of six cognitive pretest interviews, three web and three hard-copy, were conducted on January 19th and 20th, 2015. Respondents varied by age, gender, and region, in order to represent the population as much as possible. Interviewers conducted semi-structured cognitive interviews and solicited feedback on the instrument/program, invitation letter, reminder letter, and publication list. SSRS provided a detailed memo of the pretest findings to the Fund. Based on the respondent feedback, minor changes were made to the instrument and web program. Changes to the questionnaire were made across countries. SSRS had the changes translated and provided updated questionnaires to all country partners and vendors.

Primary care doctors were recruited via postal mail and invited to participate in a paper-copy or online version of the survey. Fielding was dividing into two waves. An experiment was implemented in Wave 1 to determine whether sharing the monetary incentive with respondents in the first vs. the second contact would be most beneficial in terms of response rate. After Wave 1 had been in field for a significant amount of time, we observed that the response rate was higher for the records that received the incentive in the second contact; consequently, that same procedure of including the incentive in the second contact was employed for Wave 2. To encourage participation, PCPs were mailed an incentive check of $25 prior to completing the survey and a list of publications based on previous International Health Policy surveys.

Doctors in the US received an advance invitation including the web link and up to ten additional contacts/reminders during the field (i.e., two or three paper questionnaires, two post cards, and up to five email reminders). The specifications for each contact/wave are outlined below. Email reminders were sent to the 59% of the sample for which email addresses could be appended by the sample provider (SK&A).

TABLE 31: US Contact Schedule

Contact	Wave1	Wave 2	80% of Wave 1 / All of Wave 2 Incentive in second contact	20% of Wave 1 Incentive in first contact
1	03/02/15	04/14/15	•Cover letter with web link •List of The Commonwealth Fund's publications based on previous IHP studies	•Cover letter with web link •List of The Commonwealth Fund's publications based on previous IHP studies •$25 check
2	03/06/15	04/17/15	First paper copy mailing •Cover letter with web link •$25 check •8-page paper questionnaire •Postage-paid reply envelope	First paper copy mailing •Cover letter with web link •8-page paper questionnaire •Postage-paid reply envelope
3	03/09/15	04/22/15	First email with web link and unique passcode	First email with web link and unique passcode -- that works is tailored for this group (got check in first mailing)
4	03/16/15	04/23/15	First postcard	First postcard
5	03/19/15	04/29/15	Second paper copy mailing •Cover letter with web link •8-page paper questionnaire •Postage-paid reply envelope	Second paper copy mailing •Cover letter with web link •8-page paper questionnaire •Postage-paid reply envelope
6	03/23/15	05/05/15	•Second email with web link	•Second email with web link
7	03/26/15	05/07/15	•Second postcard	•Second postcard
8	03/31/15	05/18/15	•Third email with web link	•Third email with web link
9	04/07/15		•Fourth email with web link	
10	05/08/15		Third paper copy mailing •Cover letter with web link •8-page paper questionnaire •Postage-paid reply envelope	
11	05/18/15		•Fifth email with web link	

SSRS kept track of a master file of contacts initiated by US respondents throughout the field period. This file included information about the reason behind the communication established with the respondent and the decisions made to proactively address the issue raised.

To maximize response rates and similar to IHP 2012, SSRS implemented a strategy that allowed respondents in the US to provide their email address so that highlights on the survey results can be shared when they are available.

As part of the back end process, there were some duplicate cases in the US data because respondents took two or more surveys (i.e., both web and paper or two paper surveys). If duplicate cases were found, the following rules were followed to select the cases that were kept in the final data file.

1) Cases with the highest completion response rate were kept regardless of the survey mode
2) If duplicate cases for a particular respondent had identical questionnaire completion rates and the mode of completion cases was different (i.e., mail and online), the online case was kept
3) The case with the earliest date of completion was selected for duplicate cases with identical completion response rates and mode of completion (e.g., two mail-based interviews from a single respondent).

The tables below show final counts for the US by gender, age and region.

TABLE 32: US Final Counts – Gender by Age

GENDER / AGE	WEB ONLY	Gender / Age (%)	Mail Only	Gender / Age (%)	Total	Gender / Age (%)
Male / Under 35	10	4%	11	2%	21	2%
Male / 35-44	36	13%	59	8%	95	10%
Male / 45-54	52	18%	101	14%	153	15%
Male / 55-64	50	18%	170	24%	220	22%
Male / 65 or older	21	7%	88	12%	109	11%
Male total	**169**	**60%**	**429**	**61%**	**598**	**60%**
Female / Under 35	14	5%	14	2%	28	3%
Female / 35-44	39	14%	82	12%	121	12%
Female / 45-54	32	11%	88	12%	120	12%
Female / 55-64	24	8%	82	12%	106	11%
Female / 65 or older	5	2%	14	2%	19	2%
Female Total	**114**	**40%**	**280**	**39%**	**394**	**40%**
TOTAL	**283***		**709***		**992**[24]	

TABLE 33: US Final Counts – Region

REGION	WEB	Region (%)	MAIL	Region (%)	TOTAL	Region (%)
North East	69	24%	155	22%	224	22%
North Central	69	24%	154	21%	223	22%
South	87	31%	242	34%	329	33%
West	59	21%	166	23%	225	22%
TOTAL	**284**	**100%**	**717**	**100%**	**1001**	**100%**

[24] Gender by Age may not add to total completes due to respondents skipping these two questions.

SAMPLE DESIGN AND RESPONSE RATE

Sample Design and Response Rates by Country

Australia

The PCP sample in Australia was drawn from a national list of physicians provided by MDA (Medical Directory of Australia). The list contains over 23,000 Australian physicians and is updated on a monthly basis. Physicians sampled corresponded to general practitioners. The sample was stratified by region. The final sample for Australia included an oversample of New South Wales (NSW) to allow for region-specific analyses. 3,412 records were selected.

TABLE 34: Final Dispositions - Australia

Total records	3412
Ineligible[25]	108
Valid sample	3304
Completes	747
Response Rate	25.1%

Canada

The PCP sample in Canada was drawn from a national list of physicians provided by KMLists (a division of Redi-Data). The list was derived from the Canadian Medical Directory master file. The list contains over 65,000 Canadian physicians and is updated on a monthly basis. KMLists databases include office-based mailing addresses for all of the physicians and email addresses for approximately 63.6% of physicians. Physicians sampled were general practitioners and family practitioners. Sample was randomly selected among each of these groups and certain provinces were oversampled. 7,228 records were selected.

[25] This group was mainly composed of PCPs who screened out as not being involved in primary care. In Australia (similar to NZ) a screener was implemented asking PCPs whether they want to participate and if they are involved in direct patient care or not similar to what was done in IHP 2012.

TABLE 35: Final Dispositions - Canada

Total records	7228
Non-deliverables and ineligibles[26]	14
Valid sample	7214
Completes	2284
Response Rate	31.7%

Germany

For Germany, the sample was provided by Lagoon Media GmbH. For Germany, 3,000 PCPs were selected from the sample provided by Lagoon Media GmbH, composed of general practitioners and pediatricians, distributed according to the latest data from the National Association of Statutory Health Insurance Physicians Berlin. The distribution across the regions (16 Bundesländer) was likewise proportionately selected according to the latest data from the National Association of Statutory Health Insurance Physicians Berlin (Statistische Informationen Bundesarztregister 12/31/2013).

TABLE 36: Final Dispositions - Germany

Total records	3000
Non-deliverables	11
Valid sample	2989
Completes	559
Response Rate	18.7%

The Netherlands

The Dutch PCP sample was randomly drawn from the database of the Netherlands Institute of Health Services Research (NIVEL). The database contains approximately 8,800 general practitioners, working in approximately 5,000 practices. Physicians sampled corresponded to primary care physicians. A selection of 1,602 records was employed.

[26] The "ineligible" category corresponded in most instances to a small group of respondents who directly contacted the survey-fielding company about not being in primary care, being retired or for whom information about being deceased was obtained.

TABLE 37: Final Dispositions - The Netherlands

Total records	1602
Non-deliverables	79
Valid sample	1523
Completes	618
Response Rate	40.6%

New Zealand

In New Zealand the PCP sample was randomly selected from the Medidata (MIMS) lists. The total PCP population, according to the respondent qualifications for this study, is of approximately 2,000 per the Medical Council of New Zealand - The New Zealand Medical Workforce in 2012. This list is updated daily. The sample was stratified by region and the physicians sampled corresponded to general practitioners.

TABLE 38: Final Dispositions - New Zealand

Total records	2248
Ineligible[27]	120
Valid sample	2128
Completes	503
Response Rate	27.7%

Norway

In Norway sample was drawn from a registry of general practitioners at the Norwegian Directorate of Health. 2,000 records were selected out of the total sample list of 4,544 records. Physicians sampled corresponded to general practitioners.

[27] This group was mainly composed of physicians who screened out as not being involved in primary care. In New Zealand, similar to Australia, a screener was implemented asking sampled physicians whether they want to participate and if they are involved in direct patient care or not similar to what was done in IHP 2012.

TABLE 39: Final Dispositions - Norway

Total records	2000
Non-deliverables and ineligibles[28]	53
Valid sample	1947
Completes	864
Response Rate	44.4%

Sweden

PCPs in Sweden were sampled from the OneKey database (www.onekey.se) administrated by Cegedim (www.cegedim.com). The database is the world's largest and best updated source for address information regarding professionals in healthcare. The target population consisted of general practitioner specialists and general practitioners under specialist training working independently at a primary care center. The full sample list of 6,300 records were selected.

TABLE 40: Final Dispositions - Sweden

Total records	6310
Non-deliverables and ineligibles[29]	59
Valid sample	6251
Completes	2905
Response Rate	46.5%

Switzerland

The sample in Switzerland was provided by The Swiss Medical Association (FMH) member file. The sample was then randomly selected. The French and Italian Linguistic Regions were oversampled. 2,857 records were selected from the list of 6,904 PCPs.

[28] The "ineligible" category corresponded in most instances to a small group of respondents who directly contacted the survey-fielding company about not being in primary care, being retired or for whom information about being deceased was obtained.
[29] The "ineligible" category corresponded in most instances to a small group of respondents who directly contacted the survey-fielding company about not being in primary care, being retired or for whom information about being deceased was obtained.

TABLE 41: Final Dispositions - Switzerland

Total records	2857
Ineligibles[30]	123
Valid sample	2734
Completes	1065
Response Rate	39.0%

The United Kingdom

The UK sample of PCPs was drawn from an online source provided by Specialist Info. This list is updated daily and has details on over 43,000 general practitioners. The London, Scotland, Wales and Northern Ireland regions were oversampled. A total of 2,907 records were selected from the sample list.

TABLE 42: Final Dispositions - UK

Total records	2907
Ineligibles[31]	236
Valid sample	2671
Completes	1001
Response Rate	39.4%

The United States

SSRS procured the sample for PCPs in the United States from SK&A. SK&A databases of physicians and other health-care providers are continuously updated. Physicians sampled were internal medicine physicians, family medicine physicians, general practitioners, or pediatricians. The sample was randomly selected among each of these groups. SK&A databases include office-based mailing addresses for all of the physicians and email addresses for approximately 60% of physicians. The population is of about 181,928 PCPs according to the 2014 AMA; 3,254 records were selected for this study via SK&A.

[30] Includes respondents who said they are not PCPs, bad addresses, PCPs who died, or cases where the postal address nor the phone number is working.

[31] Includes respondents who failed the screener (respondents in groups that were over quota, did not spend more than 50% of their time in direct patient care, not a general practitioner, or refused to provide a current job title), and non-working/invalid phone numbers.

TABLE 43: Final Dispositions - US

Total records	3254
Non-deliverables and ineligibles[32]	12
Valid sample	3242
Completes	1001
Response Rate	30.9%

WEIGHTING

Detailed Weighting Procedures by Country

Australia

The PCP data in Australia were weighted to account for: 1) the over-representation of PCPs in New South Wales (NSW) and (2) differential non-response along known geographic and demographic parameters.

The weighting adjustment was conducted in one stage:

Post-Stratification Weight: An iterative proportionate fitting (IPF) procedure was used to create the post-stratification weights. This is a procedure in which the data are repeatedly balanced to match the known marginal distribution of population parameters.

The PCP survey data were balanced to the distribution of the PCPs along the following parameters: gender, age, urbanicity, and region.

Benchmarks were derived from the following sources:

- Gender and age were generated using the Australian Government – Dept. of Health – General Practice Statistics 2013-14.
- Urbanicity and region were derived from the number of GPs in each postcode according to The Medical Directory of Australia (MDA) as of January 2015.

[32] The "ineligible" category corresponded in most instances to a small group of respondents who directly contacted the survey-fielding company about not being in primary care, being retired or for whom information about being deceased was obtained.

TABLE 44: Weighted and Unweighted Distributions and Population Parameters for Australia[33]

	Unweighted (%)	Weighted (%)	Target (%)
GENDER			
Male	57.4	63.0	63.0
Female	42.6	37.0	37.0
AGE			
<35	14.7	11.3	11.3
35-44	29.0	28.8	28.8
45-54	26.1	32.1	32.1
55-64	24.0	17.3	17.3
65+	6.2	10.5	10.5
URBANICITY			
Major Cities	69.6	71.2	71.1
Inner Regional	22.2	19.9	19.9
Outer Regional	7.1	7.8	7.8
Remote	1.1	1.1	1.1
REGION			
New South Wales (NSW)	53.7	31.4	31.4
Australian Capital Territory (ACT)	1.6	2.2	2.2
Victoria (VIC)	14.2	21.4	21.4
Queensland (QLD)	14.9	22.4	22.4
South Australia (SA)	5.6	8.3	8.3
Western Australia (WA)	7.2	10.4	10.4
Tasmania (TAS)	1.7	2.4	2.4
Northern Territory (NT)	1.1	1.6	1.6

Following post-stratification weighting the weights were truncated ('trimmed') to reduce variance caused by extremely large weights. The weights were truncated to a range of 0.25 to 4.

Canada

The PCP data in Canada were weighted to account for: (1) the over-representation of PCPs in some provinces; (2) the availability of an email address or not (since respondents with email addresses could be contacted both by mail and email); and (3) differential nonresponse along known geographic and demographic parameters.

The weighting adjustment was conducted in two stages:

(1) **Design Weight[34]**: The distributions by email availability and province[35] were balanced to the breakdown in the sampling frame. The design-weight adjustment for email availability was done separately for

[33] Missing data for gender and age were imputed using a Hot Deck procedure prior to raking.
[34] Post-stratification information was not available for the three smallest provinces: Northwest Territories, Nunavut, and Yukon Territory. One interview was completed in Nunavut. Due to the small population sizes and given that the statistics obtained did not include weighting benchmarks, a weight of 1 was assigned to this interview.
[35] The distribution of PCPs by province, weighted and unweighted, is displayed in the post-stratification section.

Ontario, Quebec and the rest of Canada. In addition, a design-weight adjustment for province was done for non-Ontario/non-Quebec provinces.

(2) **Post-Stratification Weight**: An IPF procedure was used to create the post-stratification weights. This is a procedure in which the data are repeatedly balanced to match the known marginal distribution of population parameters.

In Canada, data were weighted by age and gender (for Ontario, Quebec and the rest of Canada) and by province. All benchmarks were derived from the CMA Masterfile, January 2015, Canadian Medical Association.[36]

TABLE 45: Weighted and Unweighted Distributions and Population Parameters for Ontario[37]

	Unweighted (%)	Weighted (%)	Target (%)
GENDER			
Male	52.9	56.9	56.9
Female	47.1	43.1	43.1
AGE			
<35	10.0	8.3	8.3
35-44	22.8	22.0	22.0
45-54	25.8	27.7	27.7
55-64	26.0	25.6	25.6
65+	15.4	16.5	16.5

TABLE 46: Weighted and Unweighted Distributions and Population Parameters for Quebec[38]

	Unweighted (%)	Weighted (%)	Target (%)
GENDER			
Male	41.8	48.7	48.7
Female	58.2	51.3	51.3
AGE			
<35	23.5	11.9	11.9
35-44	22.0	19.1	19.1
45-54	20.2	25.3	25.3
55-64	23.1	29.5	29.5
65+	11.2	14.2	14.2

[36] The weighting benchmarks excluded PCPs over the age of 80. Age was imputed for about 3.5% of cases using average age of graduation at 26 years old; less than half of a percent (< .2%) of cases were excluded due to not being able to impute age or because data for gender was missing.

[37] Missing data for gender and age were imputed using a Hot Deck procedure prior to raking.

[38] Missing data for gender and age were imputed using a Hot Deck procedure prior to raking.

TABLE 47: Weighted and Unweighted Distributions and Population Parameters for the Rest of Canada[39]

	Unweighted (%)	Weighted (%)	Target (%)
GENDER			
Male	55.7	59.8	61.3
Female	44.3	40.2	38.7
AGE			
<35	14.8	9.1	8.3
35-44	24.2	23.9	24.2
45-54	26.0	28.7	28.5
55-64	22.7	25.0	25.1
65+	12.4	13.4	13.8
PROVINCE			
Alberta	14.1	27.9	28.2
British Columbia	15.4	33.6	35.6
Manitoba	14.4	8.5	8.0
New Brunswick and Prince Edward Island	14.5	7.9	7.4
Newfoundland	13.1	5.5	5.1
Nova Scotia	13.6	8.1	7.6
Saskatchewan	14.9	8.4	7.9

TABLE 48: Weighted and Unweighted Distributions by Province for Canada

	Unweighted (%)	Weighted (%)	Target (%)
PROVINCE			
Alberta	7.8	11.9	12.1
British Columbia	8.6	14.4	15.3
Manitoba	8.0	3.7	3.4
New Brunswick and Prince Edward Island	8.1	3.4	3.2
Newfoundland	7.3	2.4	2.2
Nova Scotia	7.6	3.5	3.3
Ontario	24.4	33.3	33.3
Quebec	19.9	23.9	23.9
Saskatchewan	8.3	3.6	3.4

In the final weighting step, the weights were adjusted so that the share of each province would reflect the share of that province among Canadian PCPs. Following post-stratification weighting the weights were truncated ('trimmed') to reduce variance caused by large weights. The weights were truncated to a range of 0.25 to 4. Weights were then adjusted to match the proportion of PCPs by province within Canada. Due to the small population sizes and given that the statistics obtained did not include weighting benchmarks, a weight of 1 was assigned to the Northwest Territories, Nunavut, and Yukon Territory.

[39] Missing data for gender and age were imputed using a Hot Deck procedure prior to raking.

Germany

The PCP data in Germany were weighted to account for differential non-response along known geographic and demographic parameters:

Post-Stratification Weight: An IPF procedure was used to create the post-stratification weights. This is a procedure in which the data are repeatedly balanced to match the known marginal distribution of population parameters.

The PCP survey data were balanced to the distribution of the PCPs along the following parameters: gender, age, region and specialty type.

Benchmarks were derived from the following sources:

- Specialty, gender and region were derived the National Association of Statutory Health Insurance Physicians Berlin "Statistische Informationen Bundesarztregister 31.12.2013".
- The age benchmarks were the same as the ones used for IHP 2012 PCP study which, according to the 2012 Methodology Report from Harris Interactive, were derived from German Medical Association.

TABLE 49: Weighted and Unweighted Distributions and Population Parameters for Germany

	Unweighted (%)	Weighted (%)	Target (%)[40]
GENDER			
Male	56.4	55.6	55.7
Female	43.5	44.2	44.2
Missing data	.2	.2	0.2
AGE			
<35	.9	1.0	1.0
35-44	13.1	35.5	35.6
45-54	34.5	27.5	27.5
55-64	39.7	28.5	28.5
65+	11.4	7.1	7.1
Missing data	.4	.4	0.4
REGION			
Schleswig-Holstein	3.0	3.3	3.3
Hamburg	2.5	2.1	2.1
Niedersachsen	8.6	8.9	8.9
Bremen	1.1	.7	0.7
Nordrhein-Westfalen	16.8	17.1	17.1
Rheinland-Pfalz	4.1	5.3	5.3
Saarland	1.3	1.2	1.2
Hessen	6.8	7.4	7.4
Baden-Württemberg	13.6	13.6	13.6
Bayern	13.4	15.9	15.9
Berlin	4.7	3.5	3.5
Mecklenburg-Vorpommern	1.6	1.8	1.8
Brandenburg	2.9	2.5	2.5
Sachsen-Anhalt	3.8	2.2	2.2
Thüringen	2.9	2.7	2.7
Sachsen	5.5	4.3	4.3
Missing data	7.5	7.5	7.5
SPECIALTY TYPE			
General Practitioner	80.3	78.2	78.2
Pediatrician	12.2	14.3	14.3
Missing data	7.5	7.5	7.5

Following post-stratification weighting the weights were truncated ('trimmed') to reduce variance caused by extremely large weights. The weights were truncated to a range of 0.25 to 4.

[40] Missing data for gender, age and specialty type were assumed to follow the same distribution as the non-missing data. Unlike most other countries, for Germany, we did not have reliable variables to perform a Hot Deck procedure prior to raking.

The Netherlands

The PCP data in the Netherlands were weighted to account for differential non-response along known geographic and demographic parameters:

Post-Stratification Weight: An IPF procedure was used to create the post-stratification weights. This is a procedure in which the data are repeatedly balanced to match the known marginal distribution of population parameters.

The PCP survey data were balanced to the distribution of the PCPs along the following parameters: gender and age. The parameters were the same as in IHP 2012. Benchmarks were derived from 2015 data from the Netherlands Institute for Health Services Research (NIVEL).

TABLE 50: Weighted and Unweighted Distributions and Population Parameters for the Netherlands

	Unweighted (%)	Weighted (%)	Target (%)[41]
GENDER			
Male	52.4	53.2	53.2
Female	44.8	44.0	44.0
Missing data	2.8	2.8	2.8
AGE			
<35	5.0	4.5	4.5
35-44	27.5	28.0	28.0
45-54	31.4	31.2	31.2
55-64	33.5	33.2	33.2
65+	2.3	2.7	2.7
Missing data	.3	.3	0.3

Following post-stratification weighting the weights were truncated ('trimmed') to reduce variance caused by extremely large weights. The weights were truncated to a range of 0.25 to 4.

New Zealand

The PCP data in New Zealand were weighted to account for differential non-response along known geographic and demographic parameters:

[41] Missing data for gender and age were assumed to follow the same distribution as the non-missing data. Unlike most other countries, for the Netherlands, we did not have reliable variables to perform a Hot Deck procedure prior to raking.

Post-Stratification Weight: An IPF procedure was used to create the post-stratification weights. This is a procedure in which the data are repeatedly balanced to match the known marginal distribution of population parameters.

The PCP survey data were balanced to the distribution of the PCPs along the following parameters: gender, age, and region.

Benchmarks were derived from the following sources:

- Gender and age were generated from the Medical Council of New Zealand - The New Zealand Medical Workforce in 2012.
- Region was derived from Medidata, a division of the MIMS (NZ) Ltd group, 2012.

TABLE 51: Weighted and Unweighted Distributions and Population Parameters for New Zealand[42]

	Unweighted (%)	Weighted (%)	Target (%)
GENDER			
Male	49.5	55.0	55.0
Female	50.5	45.0	45.0
AGE			
<35	14.3	9.0	9.0
35-44	23.5	29.0	29.0
45-54	29.6	40.0	40.0
55-64	27.0	18.0	18.0
65+	5.6	4.0	4.0
REGION			
Northern/Auckland	36.6	36.2	36.2
Central North Island	19.3	18.0	18.0
Lower North Island	17.9	19.8	19.8
South Island	26.2	26.0	26.0

Following post-stratification weighting the weights were truncated ('trimmed') to reduce variance caused by extremely large weights. The weights were truncated to a range of 0.25 to 4.

Norway

The PCP data in Norway were weighted to account for differential non-response along known geographic and demographic parameters:

[42] Missing data for gender and age were imputed using a Hot Deck procedure prior to raking.

Post-Stratification Weight: An IPF procedure was used to create the post-stratification weights. This is a procedure in which the data are repeatedly balanced to match the known marginal distribution of population parameters.

The PCP survey data were balanced to the distribution of the PCPs along the following parameters: gender, age, and region. All benchmarks were derived from The Registry of GPs at the Norwegian Directorate of Health 2015.

TABLE 52: Weighted and Unweighted Distributions and Population Parameters for Norway[43]

	Unweighted (%)	Weighted (%)	Target (%)
GENDER			
Male	57.9	59.9	59.9
Female	42.1	40.1	40.1
AGE			
<35	12.3	13.1	13.1
35-44	29.3	31.7	31.7
45-54	22.7	22.0	22.0
55-64	29.2	27.0	27.0
65+	6.6	6.2	6.2
Region			
Østfold	4.7	5.3	5.3
Akershus	8.7	9.8	9.8
Oslo	9.8	11.3	11.3
Hedmark	4.6	3.9	3.9
Oppland	4.9	4.2	4.2
Buskerud	4.6	5.0	5.0
Vestfold	5.0	4.2	4.2
Telemark	4.6	3.5	3.5
Aust-Agder	3.1	2.4	2.4
Vest-Agder	3.7	3.7	3.7
Rogaland	8.0	8.3	8.3
Hordaland	9.7	9.8	9.8
Sogn og Fjordane	2.3	2.7	2.7
Møre og Romsdal	4.5	5.5	5.5
Sør-Trøndelag	7.3	6.1	6.1
Nord-Trøndelag	2.5	2.8	2.8
Nordland	5.0	5.4	5.4
Troms	4.4	3.8	3.8
Finnmark	2.4	2.0	2.0

Following post-stratification weighting the weights were truncated ('trimmed') to reduce variance caused by extremely large weights. The weights were truncated to a range of 0.25 to 4.

[43] Missing data for gender and age were imputed using a Hot Deck procedure prior to raking.

Sweden

The PCP data in Sweden were weighted to account for differential non-response along known geographic and demographic parameters:

Post-Stratification Weight: An IPF procedure was used to create the post-stratification weights. This is a procedure in which the data are repeatedly balanced to match the known marginal distribution of population parameters.

The PCP survey data were balanced to the distribution of the PCPs along the following parameters: gender, age, and region. All benchmarks were derived from the OneKey database (www.onekey.se) administrated by Cegedim (www.cegedim.com).

TABLE 53: Weighted and Unweighted Distributions and Population Parameters for Sweden[44]

	Unweighted (%)	Weighted (%)	Target (%)
GENDER			
Male	46.5	48.5	48.5
Female	53.5	51.5	51.5
AGE			
<35	9.2	9.1	9.1
35-44	25.6	26.6	26.6
45-54	22.2	24.4	24.4
55-64	29.3	28.1	28.1
65+	13.7	11.8	11.8
Region			
Stockholm	22.1	24.7	24.7
Uppsala	3.6	3.5	3.5
Södermanland	2.6	3.1	3.1
Östergötland	5.0	4.3	4.3
Jönköping	3.6	3.6	3.6
Kronoberg	2.3	2.3	2.3
Kalmar	2.3	2.3	2.3
Gotland	0.6	0.6	0.6
Blekinge	1.4	1.5	1.5
Skåne	14.4	13.7	13.7
Halland	3.4	3.4	3.4
Västra Götaland	16.1	16.1	16.1
Värmland	2.5	2.8	2.8
Örebro	3.1	2.7	2.7
Västmanland	2.0	2.3	2.3
Dalarna	2.9	2.4	2.4
Gävleborg	3.3	2.3	2.3
Västernorrland	2.2	2.1	2.1
Jämtland	1.7	1.5	1.5
Västerbotten	2.4	2.4	2.4
Norrbotten	2.4	2.4	2.4

Following post-stratification weighting the weights were truncated ('trimmed') to reduce variance caused by extremely large weights. The weights were truncated to a range of 0.25 to 4.

Switzerland

The PCP data in Switzerland were weighted to account for: (1) the over/under sampling of PCPs in some linguistic regions and (2) differential non-response along known geographic and demographic parameters.

[44] Missing data for gender and age were imputed using a Hot Deck procedure prior to raking.

The weighting adjustment was conducted in two stages:

(1) **Design Weight**: Bias was addressed by applying weights to the data, so that the breakdown of PCPs by province is balanced to the breakdown in the sampling frame (the Swiss Medical Association (FMH) sample).

TABLE 54: Linguistic Region Design Weight

Linguistic Region	FMH Sample (%)	Data (%)	Weight
German	69.6	60.5	1.15
French	25.6	29.7	0.86
Italian	4.8	9.8	0.49

(2) **Post-Stratification Weight**: An IPF procedure was used to create the post-stratification weights. This is a procedure in which the data are repeatedly balanced to match the known marginal distribution of population parameters.

The PCP survey data were balanced to the distribution of the PCPs along the following parameters: gender, age, and linguistic region. All benchmarks were derived from The Swiss Medical Association (FMH) member file, March 2015

TABLE 55: Weighted and Unweighted Distributions and Population Parameters for Switzerland[45]

	Unweighted (%)	Weighted (%)	Target (%)
GENDER			
Male	70.1	67.0	67.0
Female	29.9	33.0	33.0
AGE			
<35	1.6	0.8	0.8
35-44	22.6	18.1	18.1
45-54	28.5	31.2	31.2
55-64	36.9	36.3	36.3
65+	10.4	13.5	13.5
LINGUISTIC REGION[46]			
German	60.5	69.6	69.6
French	29.7	25.6	25.6
Italian	9.8	4.8	4.8

Following post-stratification weighting the weights were truncated ('trimmed') to reduce variance caused by extremely large weights. The weights were truncated to a range of 0.25 to 4.

[45] Missing data for gender and age were imputed using a Hot Deck procedure prior to raking.
[46] A weight of 1 was assigned to cases corresponding to the Rhaeto-Romansch linguistic region as the sample size was small (n=2), and the statistics forwarded by M.I.S. Trend S.A. did not include benchmarks for that linguistic region.

The United Kingdom

The PCP data in the UK were weighted to account for: (1) the oversampling of PCPs in some regions and (2) differential non-response along known geographic and demographic parameters.

The weighting adjustment was conducted in two stages:

(1) **Design Weight**: Weights were applied to balance the distribution of PCPs by region to the breakdown according to the General Medical Council (GMC).

TABLE 56: Region Design Weight

Region	GMC (%)	Data (%)	Weight
England excluding London	68.7	47.5	1.45
London	13.6	20.0	0.68
Scotland	10.2	13.6	0.75
Wales	4.5	11.0	0.41
Northern Ireland	3.0	8.0	0.38

(2) **Post-Stratification Weight**: An IPF was used procedure to create the post-stratification weights. This is a procedure in which the data are repeatedly balanced to match the known marginal distribution of population parameters.

The PCP survey data were balanced to the distribution of the PCPs along the following parameters: gender, age, and region. All benchmarks were derived from The General Practitioner Register from the General Medical Council, as of December 31, 2013.

TABLE 57: Weighted and Unweighted Distributions and Population Parameters for the UK[47]

	Unweighted (%)	Weighted (%)	Target (%)
GENDER			
Male	67.7	50.9	50.9
Female	32.3	49.1	49.1
AGE			
<35	11.5	13.8	13.8
35-44	28.7	30.9	30.9
45-54	30.4	30.0	30.0
55-64	25.1	19.2	19.1
65+	4.4	6.2	6.2
REGION			
England excluding London	47.5	68.6	68.7
London	20.0	13.6	13.6
Scotland	13.6	10.2	10.2
Wales	11.0	4.5	4.5
Northern Ireland	8.0	3.0	3.0

Following post-stratification weighting the weights were truncated ('trimmed') to reduce variance caused by extremely large weights. The weights were truncated to a range of 0.25 to 4.

The United States

The PCP data in the US were weighted to account for: (1) the availability of an email address or not (since respondents with email addresses could be contacted both by mail and email) and (2) differential non-response along known geographic and demographic parameters.

The weighting adjustment was conducted in two stages:

(1) **Design Weight**: Bias was addressed by applying weights to the data, so that the breakdown of email availability is balanced to the breakdown according to the sampling frame.

(2) **Post-Stratification Weight**: An IPF procedure was used to create the post-stratification weights. This is a procedure in which the data are repeatedly balanced to match the known marginal distribution of population parameters.

[47] Missing data for gender and age were imputed using a Hot Deck procedure prior to raking.

The PCP survey data were balanced to the distribution of the PCPs along the following parameters: gender, age, region and specialty type. All benchmarks were derived from the using the 2014 AMA Physicians Masterfile.

TABLE 58: Weighted and Unweighted Distributions and Population Parameters for the US[48]

	Unweighted (%)	Weighted (%)	Target (%)
GENDER			
Male	60.3	60.2	60.2
Female	39.7	39.8	39.8
AGE			
<35	4.9	5.5	5.5%
35-44	21.8	20.3	20.3
45-54	27.4	29.0	29.0
55-64	33.1	29.0	29.0
65+	12.9	16.1	16.1
REGION			
East	22.4	21.2	21.2
Midwest	22.3	23.1	23.1
South	32.9	33.4	33.4
West	22.5	22.3	22.3
SPECIALTY TYPE			
Internal medicine physicians	28.8	37.3	37.3
Family medicine physicians	44.8	36.5	36.5
General practitioners	1.7	3.1	3.1
Internal medicine – Pediatric/Pediatricians	24.8	23.1	23.1

Following post-stratification weighting the weights were truncated ('trimmed') to reduce variance caused by extremely large weights. The weights were truncated to a range of 0.25 to 4.

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.

[48] Missing data for gender and age were imputed using a Hot Deck procedure prior to raking.

TABLE 59: Design Effect and Margin of Error by Country

	Design Effect	Margin of Error
Australia	1.30	4.1
Canada	1.36	2.4
Quebec	1.11	4.8
Ontario	1.11	4.4
Rest of Canada (excluding Northwest Territories, Nunavut, and Yukon)	1.64	3.5
Germany	1.54	5.1
Netherlands	1.00	3.9
New Zealand	1.14	4.7
Norway	1.03	3.4
Sweden	1.02	1.8
Switzerland	1.09	3.1
UK	1.41	3.7
US	1.08	3.2

DELIVERABLES/UPDATES

Bi-weekly and Periodic Updates

In April (for the UK and Canada) and May (for NSW), 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.

Preliminary Data

SSRS delivered a preliminary weighted SPSS dataset and the all-country banner (the banner which consisted of banner points per country) to The Commonwealth Fund.

Final Data

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 formats, (3) final methodology report, (5) final versions of the questionnaires in English as well as the translated versions, (6) final created variable and banner specification memos.

Additionally, per contractual obligations or as ad-hoc requests, SSRS shared: (1) an extraneous text memo with the Fund, (8) a topline questionnaire with the Fund, (3) syntax files per for the created variables, banner points and weighting procedures with Health Quality Ontario, and (4) a Canada Quality Report with the Canadian Institute of Health Information.