

Methodology Guide

Despite troubling patient wait lists, a number of newly minted medical specialists in Canada face employment challenges at the time of certification. Since 2011, the Royal College of Physicians and Surgeons of Canada (Royal College), has been examining the breadth of the phenomenon and underlying causes through its *Employment Study*. This methodological guide provides a study framework and outlines the current status of this research program (2011-2018). These notes are provided to the reader as background information when assessing and interpreting the study findings.

Approach

The *Employment Study* utilizes a mixed-methods research methodology that combines key informant interviews¹ and two separate online surveys. Longitudinal and static yearly data is utilized to better understand the following thematic research questions:

- Are employment patterns changing among the population of newly certified specialist physicians?
- Is there a time lag to finding employment after specialty medical certification?
- What factors contribute to new specialist physicians having difficulties finding employment in Canada?

Quantitative and qualitative data are collected through online surveys administered to every specialist and subspecialist certified by the Royal College. Data collection is conducted by way of two separate online surveys:

1. An initial survey issued to all successful Royal College certificants
 - a. Distribution occurs 4-12 weeks following confirmation of certification after the final examination
2. A follow-up survey distributed to certificants who reported employment challenges when completing the initial survey.
 - a. Distribution occurs 12-17 months post-certification
 - b. This shorter survey was sent out starting with the 2013 new certificants.

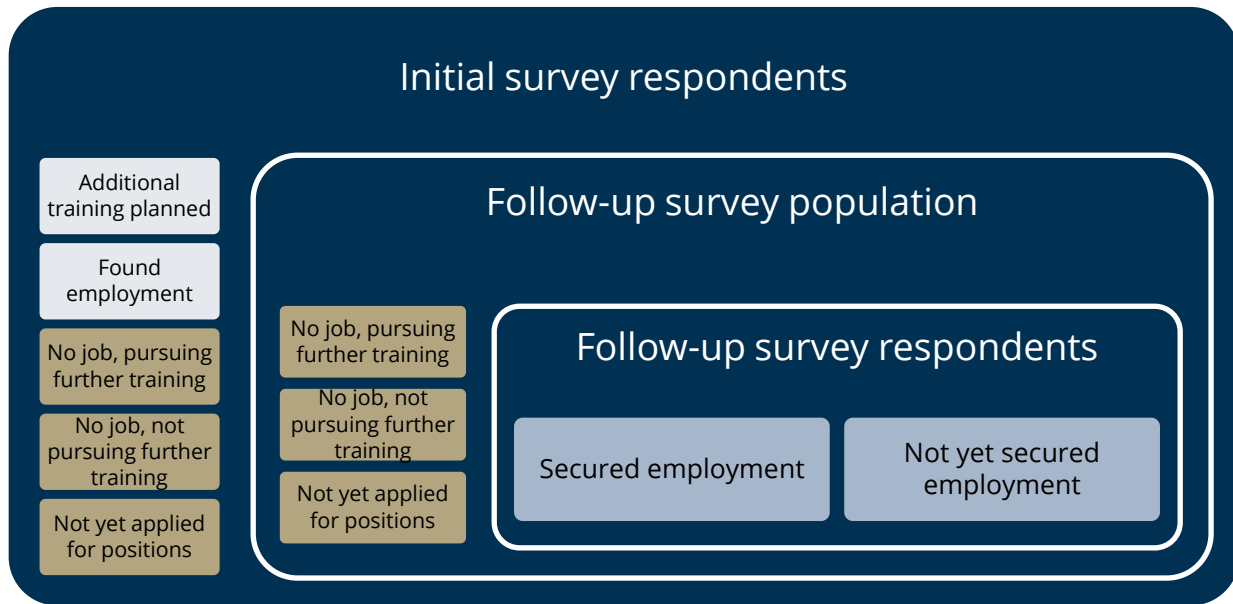
¹ Key informant interviews were undertaken in the initial phase of the study (2011-2012). Over 50 semi-structured, face-to-face and telephone interviews were conducted in a sample of individuals perceived as 'insiders' (those with first-hand, in-depth knowledge of the subject matter). Since 2013, the Employment Study has exclusively utilized the online surveys (Initial employment Survey; Follow-up survey) for data collection purposes.

All respondents were asked general questions about their training and career counseling. Using branching logic, respondents are then categorized into different groups based on previous responses to allow for more detailed inquiry (Figure 1).

Questions include:

- For those who secured employment as an independent specialist consultant:
 - Type (and number) of position(s)?
 - Length of time searching for employment?
- For those who have not yet secured employment:
 - Continuing training? Still searching? Other?
- Factors contributing to employment status?

FIGURE 1 – Categorization of respondents in the initial and follow-up surveys. Source: Royal College Employment Study, 2011-2018



Demographics and Response Rates

The Employment Study has distributed surveys to almost 20,000 new certificants and has received over 7000 responses between 2011 and 2018 as is shown in Table 1 and 2.

TABLE 1 – Initial survey characteristics. Source: Royal College Employment Study, 2011-2018

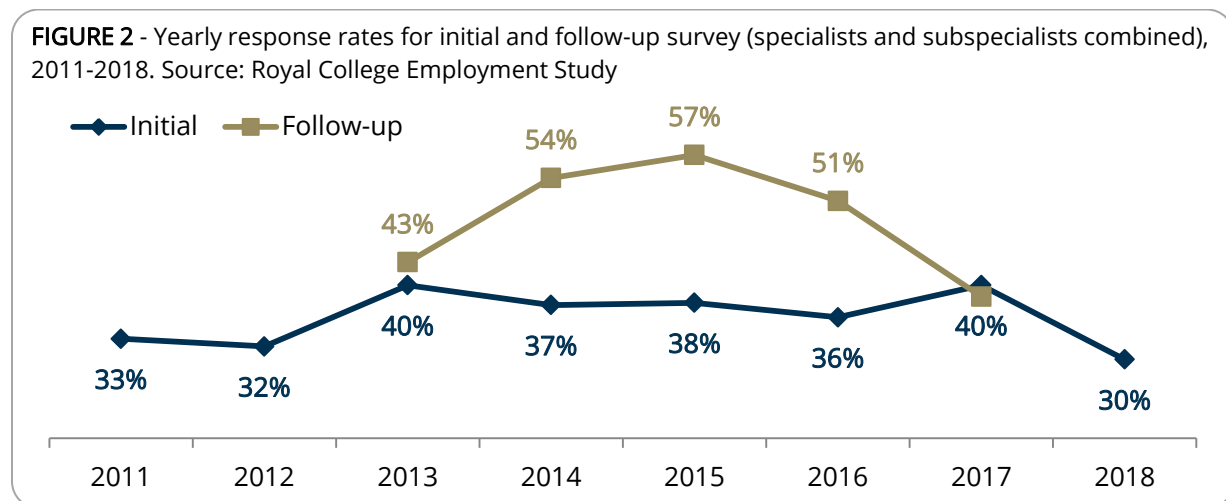
Year	Specialists		Subspecialists		Total	
	Population (N)	Respondents (n)	Population (N)	Respondents (n)	Population (N)	Respondents (n)
2011	1597	530	405	128	2002	658
2012	1766	586	465	127	2231	713

2013	1801	724	528	208	2329	932
2014	1905	689	536	225	2441	914
2015	1962	778	637	202	2599	980
2016	1951	715	691	231	2642	946
2017	2002	832	739	261	2741	1093
2018	2034	748	752	194	2786	942
Total	15018	5602	4753	1576	19771	7178

TABLE 2 – Follow-up survey characteristics. Source: Royal College Employment Study, 2011-2018

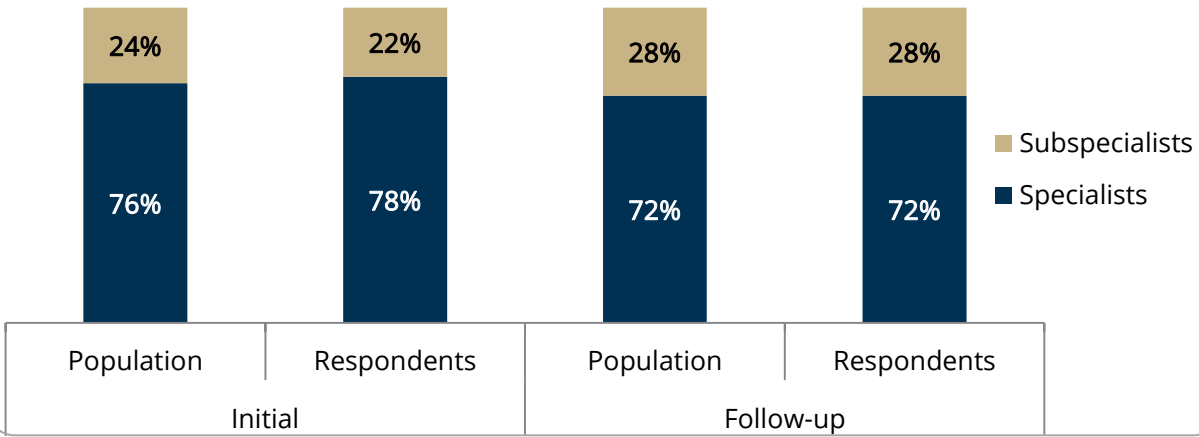
Year	Specialists		Subspecialists		Total	
	Population (N)	Respondents (n)	Population (N)	Respondents (n)	Population (N)	Respondents (n)
2013	115	48	53	24	168	72
2014	98	57	42	18	140	75
2015	108	60	37	23	145	83
2016	105	51	33	19	138	70
2017	169	65	63	24	232	89
Total	595	281	228	108	823	389

Overall, the follow-up survey had a slightly higher response rate compared to the initial survey (49% vs. 36%, respectively). Figure 2 displays the yearly response rates, noting that the follow-up survey was only sent out starting with the 2013 new certificants and the 2018 follow-up survey has not yet been distributed.



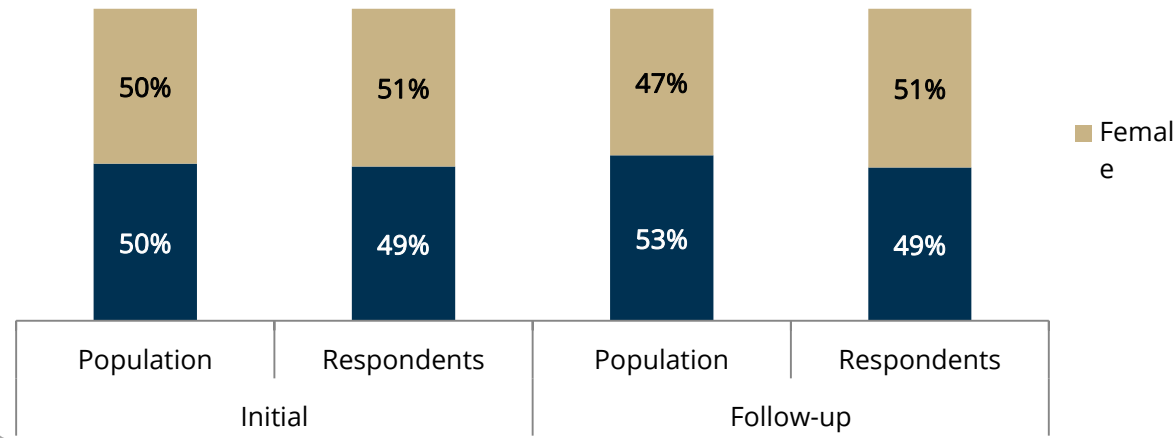
- Roughly three-quarters of the Employment Study populations were specialist certificants with the respondent distributions mirroring the population (Figure 3).
 - For the initial survey, specialists had a slightly higher overall response rate (37%) when compared to subspecialists (33%). There were no differences in the follow-up survey

FIGURE 3 - Distribution of specialist and subspecialists within the population and respondents for the initial and follow-up surveys. Source: Royal College Employment Study, 2011-2018.



- As shown in Figure 4, males and females were approximately equally distributed amongst the populations and respondents².
 - Females had a slightly higher response rate for the initial and follow-up surveys when compared with males (51% vs. 49%).

FIGURE 4 - Sex distribution within the population and respondents for the initial and follow-up surveys. Source: Royal College Employment Study, 2011-2018.



- In 2018, the average age at time of Royal College certification was 33 years old. For the initial survey, a large proportion of the population and respondent distributions were less than 35 years of age (Figure 5)³. As would be expected, the proportion of new certificants aged less than 35 decreased in the follow-up survey given that it was circulated approximately one year later.

² For the sex distribution, there were 85 initial respondents missing sex information

³ For the age distribution, there were 86 initial respondents missing age information. Also, three individuals from the initial population were missing age information

- Respondents aged 45 years of age and older had higher response rates when compared to the other age groups for the initial (42%) and follow-up (47%).

FIGURE 5 - Age distribution with the population and respondents for the initial and follow-up surveys.
Source: Royal College Employment Study, 2011-2018.

