2016 Stakeholders Advisory Committee Survey of the New Zealand Chiropractic Profession: Analysis of Survey Data

Prepared for the NZCC Stakeholders Advisory Committee

Contents

2016 Stakeholders Advisory Committee Survey of the New Zealand Chiropractic Profession: Analysis of Survey Data

Prepared for the NZCC Stakeholders Advisory Committee

Introduction

The Stakeholders Advisory Committee (SAC) advises the New Zealand College of Chiropractic (the College). As part of its advisory role, it conducts a triannual survey of the chiropractic profession in New Zealand. This survey was undertaken during March 2016. The survey was conducted online only and emailed to all registered chiropractors in New Zealand and all College graduates who had an email address listed in the Colleges database. The email that sent included instructions for completing the survey, the purpose of the survey, and it reassured respondents that the survey was anonymous. E-mails were sent out by the New Zealand Chiropractic Board and the College inviting chiropractors to participate.

The survey was an update of the survey of the profession conducted by the forerunner "Industry Advisory Committee" in 2001 and the previous SAC surveys conducted in 2004, 2007, 2010, and 2013.

Response

All registered chiropractors in New Zealand and all College graduates who had an email address listed in the Colleges database were invited to participate in the 2016 SAC Survey. Invitations to complete the survey were also made through the Colleges Facebook page and personal invitations to College graduates. Members of the 2013 graduating class were contacted by a College staff member and invited to complete the survey because the Tertiary Education Commission (TEC) requires the College to report on work and income related data for graduates in their second year in practice (i.e. the 2015 calendar year). There were 572 chiropractors holding current annual practicing certificates (APC's) in New Zealand at the time of the survey.

Two hundred and fifty-nine chiropractors completed the survey. Of those 43 were College graduates based overseas, leaving 216 New Zealand based chiropractors. This represents a

response rate of 38% of APC holders and overall 95 responses more than the 2013 SAC Survey. This is an increase on the 33% response rate for the 2013 survey and exceeds the response rate of similar surveys of the chiropractic profession that conducted overseas.

Survey Response	2001 IAC Survey	2004 SAC Survey	2007 SAC Survey	2010 SAC Survey	2013 SAC Survey	2016 SAC Survey
APC Holders	241	285	306	414	493	572
Replies	181	151	152	113	164	216*
Response Rate	75%	53%	50%	27%	33%	38%

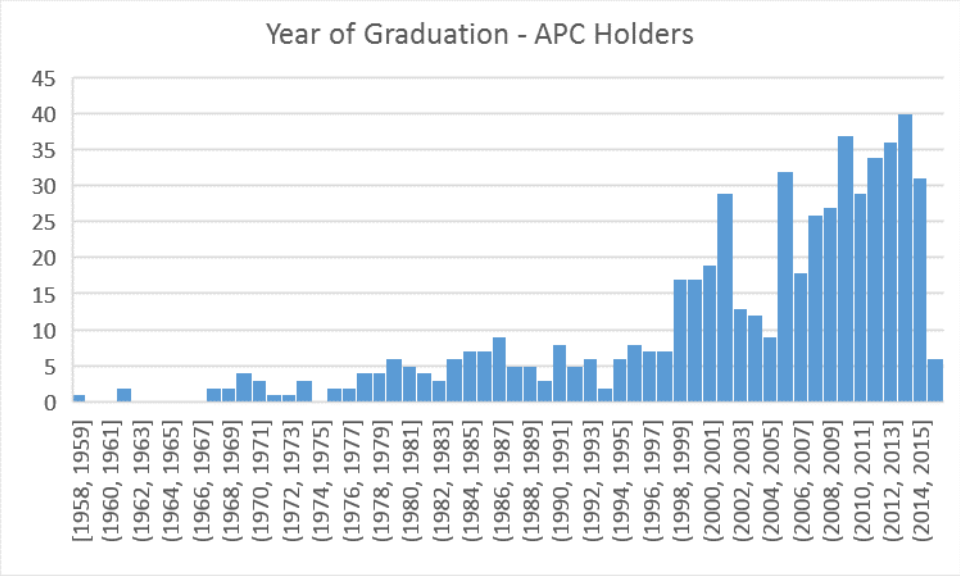
*259 responses were received but 43 were from overseas based College graduates

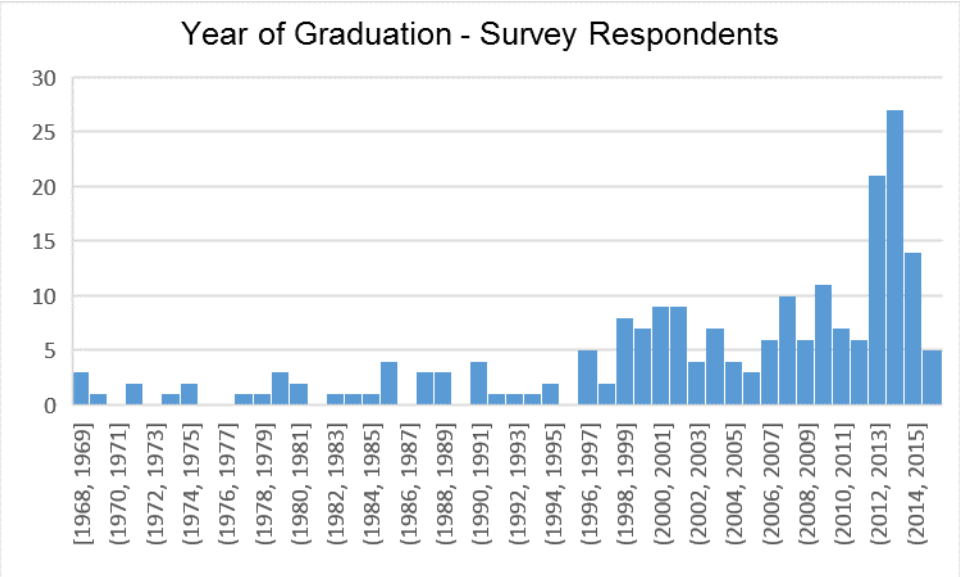
Representativeness

The response rate is often used as an indicator for the quality or representativeness of survey data. The response rate of the current survey is adequate for a survey of this nature. However, the response rate is not necessarily a good indicator of non-response bias which may be influenced by a number of factors. There is likely to be a non-response bias due to the nature of the way chiropractors were invited to participate in the survey. It is likely that College graduates are over-represented, and particularly 2013 graduates will be over-represented due to the dual role of the survey (SAC and TEC data collected). The survey may have a response bias in favour of graduates of the College because the College administered the survey process. Bearing this in mind, we aimed to maximize the response rate by using multiple sources of invitations and acknowledge this potential limitation when analyzing and reporting the results of the survey. To understand whether the composition of the responses differs from the composition of the sample as a whole, we have compared the percentage of College graduates who responded to the percentage of APC holders in New Zealand who graduated from the College. We also compared the year of graduation of respondents to that of New Zealand APC holders.

Seventy-two percent of respondents were graduates of the College, but only 55% (n=314) of APC holders are College graduates. However, excluding overseas-based graduates, College graduates make up 66% of respondents. Therefore it is unlikely to be a fatal flaw in the representativeness of the survey.

The percentage of respondents from the College, as well as the tendency of newer graduates to be willing to participate in surveys of this nature, may lead to an over-representation of newer graduates amongst respondents. To investigate this, histograms were plotted based on year of graduation for APC holders and for survey respondents practicing in New Zealand.





From these histograms it is clear that newer graduates are over-represented within survey respondents. For this reason, some questions have been analysed based on time in practice of respondents instead of just pooling all survey data. For example, when considering practice volumes and income, the results of these questions have been reported for graduates in their first two years of practice, those who graduated 2-5 years previously, those with between 6-10 years since graduation, and those with more than ten years since graduation.

The Chiropractic Practitioner

The first section of the 2016 SAC survey focused on ‘the chiropractor’. Questions in this section asked about their chiropractic education, the length of time they had spent in practice, their qualifications, their position in practice and the nature of their continuing education.

The Chiropractor

Fifty-four percent of respondents were male, which is a decrease compared to the 65% of male respondents in the 2013 SAC survey. Ninety percent of respondents indicated that they were currently practicing chiropractic as opposed to teaching or conducting research. Of those not currently seeing patients (more than 10 patients per week) 38% (n=9) still work within the chiropractic industry (teaching/research/administration) and only 2 respondents were not seeing patients because they were unable to find work. The majority of other respondents who were not seeing more than 10 patients per week were on maternity leave (n=4) or they were just setting up a new practice or beginning a new job (n-4).

Chiropractic Education

Respondents were asked to indicate which institution conferred their chiropractic degree and the year they graduated. Over two-thirds of respondents graduated from the College.

Institution	*2004 % of Respondents*	*2007 % of Respondents*	*2010 % of Respondents*	*2013 % of Respondents*	*2016 % of Respondents*
NZCC	31%	35%	48%	55%	72%
PIT/RMIT	23%	21%	15%	9%	6%
Palmer (Davenport)	14%	11%	7%	9%	5%
AECC	7%	8%	7%	4%	2%
Sherman	6%	7%	5%	6%	3%
Lincoln/National	3%	4%	1%	1%	-
CMCC	2%	3%	3%	4%	2%
Logan	3%	2%	4%	1%	1%
Macquarie	2%	2%	1%	1%	2%
Life University	1%	1%	1%	2%	2%
Life West	1%	1%	1%	1%	-
WSCC	1%	1%	1%	-	1%
Cleveland (Kansas)	1%	1%	2%	1%	0.5%
LACC / SCUHS	1%	1%	2%	3%	0.5%
New York	-	-	1%	2%	1%
Parker College	1%	0%	2%	1%	0.5%
Northwestern	-	-	-	1%	0.5%

Market Readiness

Respondents were asked if they felt that their education adequately prepared them for their chiropractic career? (e.g. Were you 'market ready' when you graduated). This question relates to one of the Colleges aims which are to graduate chiropractors who are ‘market ready.’ Sixty-three percent of College graduates indicated they were market-ready upon graduation compared to 73% of overseas graduates. This may be because of the over-representation of

recent College graduates in the survey and more recent graduates across the board felt like they were less market-ready than graduates who had been in practice for more than five years.

Do you feel that your education adequately prepared you for your chiropractic career?	*2016 +ve Response*
NZCC Graduates	63%
Overseas Graduates	73%
All Respondents	66%

Finding Work

Respondents were asked to indicate how long it took to be offered an opportunity to work in the chiropractic industry from the time they completed their studies. This was the first time this question was asked in a SAC survey in this format. Almost two-thirds of respondents were offered an opportunity to work in the chiropractic industry before they graduated.

How long did it take for your first opportunity to work in the CHIROPRACTIC INDUSTRY from the time you completed your studies?	*Recent NZCC Graduates*	*All NZCC Graduates*	*Overseas Graduates*	*All Respondents*
An opportunity was available to me before I completed my studies	61%	68%	53%	64%
An opportunity became available within one to six months of completing my studies	31%	28%	43%	32%
An opportunity became available within seven to twelve months of completing my studies	3%	3%	4%	3%
An opportunity became available more than twelve months after completing my studies	0%	0%	0%	0%
I have not worked in the CHIROPRACTIC INDUSTRY since completing my studies	4%	2%	0%	1%

Length of Time in Practice

Respondents were asked in what year they first registered as a chiropractor in New Zealand.

Length of Time in Practice in New Zealand	*2007 SAC Survey*	*2010 SAC Survey*	*2013 SAC Survey*	*2016 SAC Survey*
Fewer than two years	8%	16%	13%	9%
2-4 years	17%	14%	18%	24%

5-15 years	44%	38%	35%	39%
16-25 years	18%	15%	11%	16%
More than 25 years	13%	16%	24%	12%

Regional Representation

Respondents were asked to indicate in what area of New Zealand their main practice was located. A greater percentage of New Zealand respondents were in Auckland in the 2016 SAC Survey compared to the 2013 survey (47% vs 37%). The location of respondents is relatively consistent with the 2013 SAC survey for other regions.

Main Practice Location (For NZ based respondents)	2013 SAC Survey	2016 SAC Survey
Northland Region	7%	3%
Auckland Region	37%	47%
Waikato Region	9%	9%
Bay of Plenty Region	10%	9%
Hawke's Bay Region	5%	6%
Taranaki Region	1%	3%
Manawatu-Wanganui Region	4%	1%
Wellington Region	9%	8%
Nelson Region	4%	4%
West Coast Region	1%	0%
Canterbury Region	9%	9%
Otago Region	2%	3%

Tertiary / Post-Graduate Qualifications

Respondents were asked to indicate the highest level of education they had attained. Previously, this question asked about the highest level of non-chiropractic education they had obtained. Many respondents indicated they had a doctoral degree which likely means their DC degree. The wording of this question will need to be refined in the next SAC survey.

Type of Qualification	*2007 SAC Survey*	*2010 SAC Survey*	*2013 SAC Survey*	*2016 SAC Survey**
High School / Secondary School	-	36%	32%	-
Tertiary Certificate	-	-	9%	1%
Bachelors or Associate Degree	48%	51%	32%	70%
Post-Graduate Certificate	-	4%	7%	3%

Post-Graduate Diploma	10%	6%	6%	9%
Master's Degree	5%	4%	4%	5%
Doctoral Degree	1%	-	1%	8%

*Question modified in 2016

Respondents were asked to describe their post-graduate diplomate status (or equivalent) through an ACA or ICA specialty board, council, academy, or association.

Status	*2010 SAC Survey*	*2013 SAC Survey*	*2016 SAC Survey*
None / Does not apply	78%	76%	80%
Work toward diplomate status (or equivalent) but not completed	14%	14%	7%
Diplomate status (or equivalent) through an ACA or ICA specialty board, council, academy, or association	9%	10%	13%

Continuing Education

Respondents were asked to indicate how many group A (formal) and group B (informal) CPD hours they undertook in the previous year. This question was modified to reflect the new CPD requirements that came into effect since the 2013 SAC Survey. Chiropractors are expected to complete a total of 50 CPD hours across each two-year recertification cycle. Fifteen hours minimum need to be from group A activities and 15 hours minimum from group B activities. To meet CPD requirements, respondents should have completed at least 7.5 group A hours and 7.5 groups B hours in 2015 with a total of at least 25 hours across both groups.

Group A (Formal) CPD Hours in 2015	*2016 SAC Survey*
None	10%
1-7	5%
8-25	42%
More than 25	43%

Group B (Formal) CPD Hours in 2015	*2016 SAC Survey*
None	17%
1-7	16%
8-25	39%
More than 25	28%

Total CPD Hours in the Previous Year	2016 SAC Survey
None	9%
1-7	3%
8-25	21%
More than 25	66%

Continuing Education Activities

Respondents were asked to indicate 'in which continuing education opportunities do you participate?' The trend established in previous surveys of respondents completing a greater number of online courses continued in the 2016 SAC survey.

Continuing Education Activities	2007 SAC Survey	2010 SAC Survey	2013 SAC Survey	2016 SAC Survey
Read journals	79%	73%	67%	70%
Attend conferences/seminars	90%	90%	91%	91%
Attend diplomate courses	9%	10%	16%	16%
On-line courses	8%	21%	32%	41%
Attend hospital staff CE meetings	1%	2%	5%	3%
Other	17%	23%	29%	20%

Common activities specified by respondents that answered 'other' included regional CPD meetings or meeting with peers, mentoring students, reading textbooks, listening to educational material, receiving emailed research summaries, using other online resources, and completing university and other professional development courses.

Areas of Interest in Continuing Education

Respondents were asked to indicate which areas they were interested participating in continuing education. The most popular areas of interest were chiropractic technique (77%) and clinical neurology (69%).

Area of Interest	2010 SAC Survey	2013 SAC Survey	2016 SAC Survey
Philosophy	44%	41%	42%
Research skills	19%	12%	16%
Integrative healthcare	33%	29%	38%
Outcomes assessment	30%	26%	30%
Practice development	45%	46%	56%
Marketing	29%	31%	38%
Clinical neurology	60%	59%	69%
Paediatrics	42%	45%	57%
Sports chiropractic	42%	29%	37%

Chiropractic technique	75%	76%	77%
Succession planning	9%	11%	18%
The associate driven practice	16%	23%	21%
Diagnostic Imaging	35%	39%	37%
Rehabilitation	37%	24%	30%
Clinical Nutrition	42%	41%	46%
Animal chiropractic	14%	16%	18%
Diagnosis and Management of Internal Disorders	13%	11%	18%
Orthopaedics	28%	21%	18%
Other	8%	5%	2%

Position in Practice

Respondents were asked to indicate what best described their position in practice. Fewer respondents were sole chiropractors in the 2016 survey compared to previous years with a larger percentage of associates. This may be due to the large number of recent graduates completing the 2016 survey. When respondents who graduated within the past five years were excluded, the percentage of associates drops from 31% to 11% and the percentage of sole chiropractors or principals with associates rises from 48% to 68%. Non-practicing respondents were excluded from these results.

Position in Practice	*2004 SAC Survey*	*2007 SAC Survey*	*2010 SAC Survey*	*2013 SAC Survey*	*2016 SAC Survey*
Sole Chiropractor	51%	46%	38%	44%	30%
Principal with associate/s	13%	17%	23%	22%	18%
Associate	14%	14%	20%	19%	31%
Partner	15%	11%	8%	9%	13%
Sharing facilities	6%	5%	5%	5%	4%
Locum	1%	5%	1%	-	1%
Other	-	2%	1%	1%	2%
Inactive	-	-	6%	-	-

Leadership

Respondents were asked if they participate in a 'leadership' position within or outside of the chiropractic profession? (e.g. NZ Chiropractic Board, NZCA, Alumni Association, education, mentorship, spokesperson, community involvement). This question relates to one of the Colleges aims to graduate chiropractors who are leaders amongst the profession and community. Fewer College graduates than overseas graduates participate in leadership positions. This is likely due to the high number of respondents from the College who recently graduated. When respondents who graduated within the past five years were excluded, the results were similar between College and overseas graduates.

Do you participate in a 'leadership' position within or outside of the chiropractic profession?	NZCC Graduates	Overseas Graduates	All Respondents
Yes	31%	41%	34%
No, I'm not interested in participating in a leadership position	42%	50%	44%
No, however I am interested in participating in a leadership position but no appropriate positions are available	27%	9%	22%

The Chiropractic Practice

This section of the survey investigated the nature of the work environment and chiropractic practice including; office location, practice growth, office procedures and structure, practice management systems, staff requirements, fees, income, practice volume, and billing and office equipment. Survey results for this section were limited to respondents who practice in New Zealand.

Practice Location

Respondents were asked if they practice in more than one location. Results were consistent with previous surveys.

Practice Location	2004 % Yes	2007 % Yes	2010% Yes	2013% Yes	2016 % Yes
Do you practice from more than one location?	29%	22%	21%	24%	29%

With regards to office location, respondents were also asked to indicate the type of community their primary practice was located. Results were consistent with previous surveys.

Main Clinic Location	2010 SAC Survey	2013 SAC Survey	2016 SAC Survey
City	37%	36%	37%
Suburb	39%	37%	42%
Small town	13%	12%	10%
Small town / Rural	10%	15%	11%
Rural	-	-	-

Need for More Chiropractors

Respondents were asked if more chiropractors were needed in their local area. Forty percent responded, ‘yes'. This is slightly fewer than the 45% positive response rate observed in the 2013 SAC survey.

Question	*2004 ‘yes’*	*2007 ‘yes.'*	*2010 ‘yes.'*	*2013 ‘yes’*	*2016 ‘yes’*
Does your locality need more chiropractors?	63%	69%	47%	45%	40%

Practice Growth

Respondents were asked to indicate the growth status of their practice. Compared to the 2013 SAC survey, more respondents indicated that their practice had grown over the past year (63% v 54%). This may reflect the high response rate among new graduates who are likely to have a growing practice. If only respondents who have been in practice for at least five years a were considered, most (55%) indicated their practice had grown, and 40% had stayed the same level.

Practice Growth Status	*2004 SAC Survey*	*2007 SAC Survey*	*2010 SAC Survey*	*2013 SAC Survey*	*2016 SAC Survey*
Growing	71%	50%	44%	54%	63%
Staying Level	29%	45%	39%	43%	34%
Declining	0%	4%	16%	4%	3%

Associates and Partners

Respondents were asked if they ‘would consider taking on an associate or partner within the next 12 months?’ 46% responded ‘yes’ which is consistent with the 2013 SAC survey.

Question	*2004 ‘yes’*	*2007 ‘yes’*	*2010 ‘yes’*	*2013 ‘yes’*	*2016 ‘yes’*
Would you consider taking on an associate or partner in the next 12 months?	59%	51%	35%	46%	46%

Components of Chiropractic Practice

Respondents were asked to estimate what percentage of their time each week was spent on various aspects of chiropractic practice including; patient care and education, documentation of care and business management during a typical week. Results were consistent with the 2013 survey.

Percentage of Time Spent on Components of Chiropractic Practice	*2007 SAC Survey*	*2010 SAC Survey*	*2013 SAC Survey*	*2016 SAC Survey*

Direct Patient Care and education	73%	69%	61%	62%
Documentation of care	9%	16%	20%	20%
Business Management	18%	15%	17%	18%

Patient Visit Time Allocation

Respondents were asked to indicate how long they allowed for an average new patient visit, report of findings, and adjustment visit. The average visit time for a new patient visit was 39 minutes; the average report of findings was allocated 23 minutes, and the average adjustment 13 minutes. These visit durations were all consistent with the 2013 SAC survey.

2016 SAC Survey

Visit Time	*New Patient*	*Report of Findings*	*Adjustment*	*Progress Exam*
Minimum	10 mins	Less than 5 mins	Less than 5 mins	Less than 5 mins
Maximum	90 mins	60 mins	75 mins	65 mins
Average	39 mins	23 mins	13 mins	20 mins
Median	35 mins	20 mins	10 mins	15 mins
Mode	30 mins	30 mins	10 mins	15 mins

2013 SAC Survey

Visit Time	*New Patient*	*Report of Findings*	*Adjustment*	*Progress Exam*
Minimum	15 mins	Less than 5 mins	Less than 5 mins	5 mins
Maximum	90 mins	90 mins	60 mins	60 mins
Average	39 mins	24 mins	13 mins	19 mins
Median	40 mins	20 mins	10 mins	15 mins
Mode	30 mins	30 mins	10 mins	20 mins

Staff and Co-workers

Respondents were asked to indicate the number of full-time and part-time support staff and other healthcare providers in their offices.

FULL-TIME	*0*	*1*	*2*	*3*	*4*	*5 or more*	*Average*
CA's	58%	23%	12%	2%	3%	1%	0.70
Associates	55%	24%	15%	5%	2%	0%	0.76
Locums	99%	1%	-	-	-	-	0.01
Partners	77%	16%	3%	2%	2%	-	0.34

Business/Financial /Practice Managers	77%	21%	1%	-	-	1%	0.27
Other Healthcare Providers	68%	13%	8%	7%	3%	2%	0.67

PART-TIME	*0*	*1*	*2*	*3*	*4*	*5 or more*	*Average*
CA's	41%	22%	21%	13%	3%	1%	1.16
Associates	73%	18%	8%	2%	-	-	0.38
Locums	98%	2%	-	-	-	-	0.02
Partners	84%	14%	2%	-	-	-	0.18
Business/Financial /Practice Managers	79%	20%	1%	1%	-	-	0.24
Other Healthcare Providers	72%	13%	10%	2%	2%	1%	0.50

Diagnostic / Analytical Equipment

Respondents were asked to indicate what diagnostic or analytical equipment they use in their practice. Answers were recorded based on the percentage of new patients they assess using various pieces of equipment. From the list of equipment, the only items that are used 'at least sometimes' by half or more of the respondents were blood pressure cuff, stethoscope (possibly in conjunction with the blood pressure cuff), a reflex hammer, and a tuning fork. In general equipment usage remained relatively consistent from the 2013 to 2016 SAC survey.

Equipment	**None**	**1-25%**	**26-50%**	**51-75%**	**76-100%**
Thermography equipment	77%	1%	1%	1%	20%
Surface EMG	83%	1%	1%	1%	13%
Blood pressure cuff	32%	40%	11%	7%	11%
Stethoscope	46%	35%	10%	5%	4%
Otoscope	67%	24%	6%	1%	2%
Ophthalmoscope	64%	25%	4%	4%	3%
Reflex hammer	15%	34%	17%	17%	19%
Weight scales	65%	15%	2%	6%	12%
Thermometer	66%	24%	4%	1%	5%
Plumb line	79%	6%	4%	2%	9%
Posture analyser (eg. SAM)	66%	10%	4%	1%	19%
Inclinometer	79%	7%	5%	2%	7%
Pressure algometer	96%	3%	1%	0%	0%
Heart Rate Variability monitor	89%	6%	1%	0%	4%
Dynamometer	83%	13%	2%	1%	1%
Pinwheel (Not Disposable)	59%	27%	5%	5%	4%

Pinwheel or other device to test pain sensation (Disposable)	55%	24%	8%	6%	7%
Tuning fork	42%	44%	5%	3%	6%
Pulse Oximeter	90%	5%	1%	1%	2%
Foot scanner	89%	8%	3%	0%	0%

2013 SAC Survey Equipment Use

Equipment	None	1-25%	26-50%	51-75%	76-100%
Thermography equipment	78%	2%	0%	6%	15%
Surface EMG	80%	2%	1%	3%	14%
Blood pressure cuff	38%	43%	6%	3%	15%
Stethoscope	49%	36%	8%	2%	9%
Otoscope	72%	23%	3%	0%	4%
Ophthalmoscope	72%	20%	4%	0%	5%
Reflex hammer	16%	31%	18%	13%	26%
Weight scales	64%	8%	6%	4%	18%
Thermometer	77%	14%	2%	1%	7%
Plumb line	79%	7%	3%	3%	10%
Posture analyser (eg. SAM)	78%	8%	1%	2%	12%
Inclinometer	84%	8%	1%	0%	7%
Pressure algometer	98%	0%	2%	0%	1%
Heart Rate Variability monitor	87%	3%	2%	3%	6%
Dynamometer	84%	15%	0%	0%	2%
Pinwheel (Not Disposable)	45%	33%	6%	8%	9%
Pinwheel or other device to test pain sensation (Disposable)	58%	21%	8%	4%	8%
Tuning fork	44%	36%	6%	5%	12%
Pulse Oximeter	95%	1%	2%	0%	3%
Foot scanner	93%	3%	0%	2%	2%

Computer Equipment

Respondents were asked whether they use a computer programme to manage their appointment book or to enter clinical information (instead of a patient file card). The percentage of respondents who use a computer programme to manage their appointment book grew to 86%. The percentage of respondents that use a computer programme to enter clinical information continues to grow and was 46% in the 2016 SAC survey.

Use of a Computer Programme	*2004 SAC Survey*	*2007 SAC Survey*	*2010 SAC Survey*	*2013 SAC Survey*	*2016 SAC Survey*

To Manage Appointment Book	77%	67%	70%	79%	86%
To Enter Clinical Information	-	10%	25%	38%	46%

The following tables summarise the programmes used to manage appointment books and to enter clinical information. Cliniko now has the largest market share (24%) of the appointment book programmes in 2016.

Appointment Book Software Programme	*2004 SAC Survey*	*2007 SAC Survey*	*2010 SAC Survey*	*2013 SAC Survey*	*2016 SAC Survey*
Capable	30%	39%	37%	31%	23%
Clinic Aide	36%	17%	13%	6%	-
Cliniko	-	-	-	13%	24%
Excellent Practice	-	-	-	8%	11%
Ezybook	-	-	-	2%	2%
Front Desk	8%	15%	18%	17%	17%
Gensolve	-	-	-	5%	5%
Houston Medical	17%	8%	11%	6%	8%
MedTech	-	6%	4%	2%	-
Platinum	6%	3%	-	1%	-
Spinalogic	-	2%	1%	1%	2%
Other	-	-	14%	7%	10%

'Cliniko' also now has the largest market share of clinical information programmes, with 35% in the 2016 SAC Survey.

Clinical Information Software Programme	*2007 SAC Survey*	*2010 SAC Survey*	*2013 SAC Survey*	*2016 SAC Survey*
Capable	39%	44%	35%	18%
ClinicAide	-	4%	4%	-
Cliniko	-	-	-	35%
Excellent Practice	-	-	4%	12%
Ezybook	-	-	4%	-
Front Desk	8%	4%	6%	11%
Gensolve	-	-	6%	11%
MedTech	15%	13%	2%	-
Platinum	23%	-	4%	3%
Other	-	13%	17%	11%

Respondents were asked whether they planned to acquire software that will enable them to adopt a paperless record keeping system. Of those that do not currently use a paperless system, 49% replied that they had no plans to adopt a paperless system, 44% plan to adopt a paperless system in the next five years, and 7% plan to adopt a paperless system in the future but not within the next five years. These values are consistent with the result of the 2013 survey.

X-ray Equipment

Respondents were asked to indicate whether the practice they work in has x-ray equipment, and for those who do, whether they use digital x-ray equipment. The number of respondents who own x-ray equipment dropped from 55% in the 2010 SAC survey to 32% in the 2013 survey and 21% in the 2016 survey. Of those respondents with x-ray equipment, the percentage using digital equipment rose from 35% in the 2013 survey to 68% in the current survey. Respondents who do not own digital x-ray equipment were asked if they plan to purchase digital x-ray equipment. Sixteen percent said they do plan to make this purchase within the next five years, and a further 4% said they plan to purchase digital x-ray equipment, but not for at least five years.

X-ray Equipment	*2007 SAC Survey 'Yes' Response*	*2010 SAC Survey 'Yes' Response*	*2013 SAC Survey 'Yes' Response*	*2016 SAC Survey 'Yes' Response*
Have own x-ray machine	55%	55%	32%	21%
If yes to above, do you use digital equipment	-	0%	35%	68%

Respondents who do not own x-ray equipment were asked if they refer out for x-rays. Ninety-nine percent of respondents said they do refer out for x-rays when appropriate.

Visit Fees

Respondents were asked to indicate the fee for a standard visit for different patient types. The following tables summarise the results for the questions relating to standard office visit and new patient visit fees. Small increases were reported in visit fees between recent surveys.

Adult Adjustment Fee	*2007 SAC Survey*	*2010 SAC Survey*	*2013 SAC Survey*	*2016 SAC Survey*
Average	$41	$47	$49	$53
Median	$40	$45	$50	$50
Minimum	$25	$20	$25	$30
Maximum	$65	$105	More than $150	$110

Child Adjustment Fee	2007 SAC Survey	2010 SAC Survey	2013 SAC Survey	2016 SAC Survey
Average	$29	$34	$37	$40
Median	$30	$35	$35	$40
Minimum	$10	$15	$10	$10
Maximum	$65	$60	$100	$100

Adult New Patient Fee (without x-rays)	2007 SAC Survey	2010 SAC Survey	2013 SAC Survey	2016 SAC Survey
Average	$60	$74	$76	$87
Median	$60	$70	$75	$85
Minimum	$10	$10	$20	$30
Maximum	$140	$130	$150+	$150+

Child New Patient Fee (without x-rays)	2007 SAC Survey	2010 SAC Survey	2013 SAC Survey	2016 SAC Survey
Average	$48	$57	$59	$70
Median	$45	$50	$55	$65
Minimum	$10	$10	$10	$10
Maximum	$130	$130	$150+	$150+

Radiographic Fees

This question asked respondents to indicate x-ray fees for both sectional views and full spine series.

Radiographic Fees (Adult)	Sectional View	Full Spine Series
Average	$45	$133
Median	$45	$130
Minimum	$25	$60
Maximum	$70 or more	$200 or more

Discounted Fees

Respondents were asked if they offer discounted fees or plans including: family visits, pre-paying for a number of visits, individual year plans, and family year plans. Responses were consistent with recent surveys.

Discount Fee or Plan Offered	*2010 SAC Survey 'Yes' Response*	*2013 SAC Survey 'Yes' Response*	*2016 SAC Survey 'Yes' Response*
Family visit	59%	65%	58%
Prepay for a number of visits	48%	49%	44%
Individual year plan	20%	16%	15%
Family year plan	15%	15%	13%

Number of Office Visits

Respondents were asked to indicate the average number of patient visits they personally see each week. Across all practising respondents, the average number of patient visits was 92 per week; the median number was 80 per week, with a maximum of 280 visits per week. The average value was lower than the 2013 SAC survey. Considering that newer graduates are over-represented amongst survey respondents, it is logical to analyse these results based on time in practice. This breakdown indicates on average chiropractors are in practice for at least five years before they start to see more than 60 patients per week. When only overseas chiropractors were included, the average number of visits was 107 per week. Subgroups are too small to calculate meaningful breakdowns for overseas chiropractors based on time in practice, but for the five respondents based overseas who had been in practice for less than two years, they were seeing 116 patients per week on average.

Patient Visits per Week (OVERALL)	*2010 SAC Survey*	*2013 SAC Survey*	*2016 SAC Survey*
Average	119	99	92
Median	100	80	80
Maximum	400	480	280

2016 Breakdown of Weekly Patient Visit Numbers Based on Time in Practice – NZ Based Chiropractors

Patient Visits per Week	*Less Than 2 years in Practice*	*2-5 Years in Practice*	*6-10 Years in Practice*	*Longer than 10 Years in Practice*	*All NZ Based Respondents*
Average	59	56	80	120	88
Median	40	40	80	120	80
Maximum	240	140	200	280	280

Yearly Income

In 2016, a question was asked about the yearly income of respondents for the first time. Respondents were asked to indicate their total income for 2015. Answers were recorded in income brackets of $20,000 or $50,000. Calculations of average income would be rough estimates, so median income brackets have been reported instead of averages. The figures

below are for New Zealand based respondents who are active in practice. The median income of overseas respondents was 100-150K.

Total Income in 2015 (NZ Based Respondents)	*Less Than 2 years in Practice*	*2-5 Years in Practice*	*6-10 Years in Practice*	*Longer than 10 Years in Practice*	*All NZ Based Respondents*
Median	40-60K	40-60K	100K	150-200K	80-100K
Minimum	<20K	<20K	20-40K	20-40K	<20K
Maximum	>200K	150-200K	>200K	>200K	>200K

Diagnostic / Analytic Procedures

Respondents were asked how often they used a variety of diagnostic and analytic procedures. Their answers are summarised below.

Diagnostic / Analytic Procedures	*Never*	*Rarely*	*Sometimes*	*Often*	*Routinely*
Motion palpation	1%	1%	5%	18%	76%
Static palpation	0%	0%	1%	9%	89%
Vertebral artery insufficiency tests	18%	33%	24%	14%	11%
Vital Signs	15%	32%	28%	13%	11%
Orthopaedic tests	1%	5%	17%	30%	48%
Muscle strength tests (myotomes)	3%	7%	21%	23%	46%
Muscle tests (AK and other technique protocols)	21%	13%	15%	18%	33%
Muscle stretch reflexes	6%	17%	26%	23%	28%
Dermatomes	10%	18%	30%	23%	18%
Cranial nerve tests	7%	24%	34%	18%	16%
Cardiopulmonary examination	40%	33%	19%	6%	3%
Abdominal examination	34%	33%	23%	6%	3%
Gait Analysis	9%	18%	34%	22%	17%
Blood / Urine / Other Laboratory Examinations	55%	28%	16%	1%	0%

The following table compares the answers for this question between surveys with respect to the percentage of respondents that provided a positive response for each procedure. The results are consistent with previous surveys.

Diagnostic / Analytic Procedures	*2004 +ve*	*2007 +ve*	*2010 +ve*	*2013 +ve*	*2016 +ve*
Motion palpation	99%	100%	100%	100%	99%
Static palpation	97%	100%	100%	100%	100%
Vertebral artery tests	89%	92%	90%	80%	82%
Vital signs	70%	78%	84%	84%	85%
Orthopaedic tests	92%	99%	100%	99%	99%

Muscle tests – (myotomes)	89%	93%	99%	96%	97%
Muscle tests (AK and other technique protocols)	66%	75%	83%	77%	79%
Muscle stretch reflexes	75%	85%	94%	91%	94%
Dermatomes	85%	93%	93%	92%	90%
Cranial nerve tests	88%	93%	94%	91%	93%
Cardiopulmonary examination	62%	63%	62%	57%	60%
Abdominal examination	67%	71%	74%	65%	66%
Gait analysis	-	-	95%	96%	91%
Laboratory Examinations	-	-	51%	43%	45%

X-ray Examination

The following table reports the way respondents describe the way they use x-rays in their practice. The percentage of respondents who do not routinely use x-rays in practice has risen from 16% in 2010 to 26% in 2016.

Use of X-rays	*2010 SAC Survey*	*2013 SAC Survey*	*2016 SAC Survey*
I do not routinely use x-rays in practice	16%	20%	26%
I evaluate x-rays to rule out pathology only	26%	26%	27%
I evaluate x-rays as a part of my technique system only	1%	1%	1%
I evaluate x-rays to both rule out pathology and as a part of my technique system	57%	54%	46%

Outcomes Assessment

Respondents were asked to indicate the percentage of new patients with which they use visual analogue scales, Oswestry Disability Index, Roland Morris Disability Questionnaire, Neck Disability Index, or Quality of Life questionnaires.

2016 SAC Survey

Assessment Instrument	*None*	*1-24%*	*26 - 50%*	*51 - 75%*	*76 - 100%*
Visual analogue scale	46%	9%	7%	7%	30%
Oswestry	83%	12%	3%	2%	0%
Roland Morris	84%	11%	2%	1%	1%
Neck Disability Index	86%	12%	1%	1%	0%
Quality of Life Questionnaire	71%	10%	4%	1%	14%

2013 SAC Survey

Assessment Instrument	None	1-24%	26 - 50%	51 - 75%	76 - 100%
Visual analogue scale	52%	11%	8%	7%	22%
Oswestry	75%	13%	7%	3%	2%
Roland Morris	82%	11%	5%	2%	0%
Neck Disability Index	90%	5%	4%	1%	0%
Quality of Life Questionnaire	68%	9%	4%	4%	15%

2010 SAC Survey

Assessment Instrument	None	1-24%	26 - 50%	51 - 75%	76 - 100%
Visual analogue scale	43%	12%	8%	9%	28%
Oswestry	75%	14%	6%	4%	1%
Roland Morris	81%	12%	5%	1%	1%
Neck Disability Index	76%	12%	8%	0%	4%
Quality of Life Questionnaire	75%	12%	2%	2%	8%

Adjustive Procedures

Respondents were asked to indicate for what percentage of patients during the last year did they utilise the following adjustive procedures or technique protocols?

Adjustive Procedure	Never	Rarely	Sometimes	Frequently	Routinely
Activator Methods Chiropractic Technique (AMCT)	47%	36%	7%	8%	3%
Activator Adjusting Instrument (Without AMCT analysis protocol)	10%	18%	28%	23%	21%
Other adjusting instrument	66%	12%	6%	7%	9%
Applied Kinesiology (AK)	54%	17%	8%	6%	15%
Bio Energetic Synchronisation Technique (B.E.S.T.)	92%	4%	2%	0%	1%
Chiropractic Biophysics Technique (CBP)	91%	4%	0%	2%	2%
Cox Flexion Distraction Technique	82%	9%	4%	4%	1%
Cranial Adjusting	27%	22%	15%	16%	20%
Diversified Technique (DT)	2%	8%	10%	27%	53%
Extremity adjusting	4%	16%	28%	26%	26%
Gonstead Technique	27%	18%	20%	18%	17%
Logan basic	72%	20%	6%	2%	1%
Meric	90%	6%	1%	3%	0%
Neuro Emotional Technique (NET)	70%	14%	11%	2%	4%
Network Spinal Analysis	79%	12%	5%	0%	4%

NIMMO / Receptor tonus	81%	5%	5%	4%	4%
Palmer upper cervical / HIO	57%	16%	13%	6%	8%
Pierce-Stillwagon	96%	2%	1%	1%	0%
Sacro Occipital Technique (SOT)	36%	25%	13%	10%	15%
Thompson Technique	19%	19%	25%	20%	18%
Torque Release Technique (TRT)	84%	4%	4%	3%	5%

The following table compares the answers for this question between surveys with respect to the percentage of respondents that provided a positive response for each procedure. Techniques that were used by half or more of all chiropractors include Diversified Technique, extremity adjusting, Activator Methods Chiropractic Technique (with or without the AMCT analysis protocol), Gonstead Technique, Thompson Technique, Sacro Occipital Technique, and cranial techniques. It should be noted that in the 2010 SAC survey, the category previously listed as 'Activator' was split into Activator Methods Chiropractic Technique (AMCT) and Activator Adjusting Instrument (Without following the AMCT analysis protocol).

Adjustive Procedure	*2004 SAC +ve response*	*2007 SAC +ve response*	*2010 SAC +ve response*	*2013 SAC +ve response*	*2016 SAC +ve response*
Activator (Split into 2 categories in the 2010 Survey)	84%	90%			
Activator Methods Chiropractic Technique (AMCT)	-	-	49%	50%	53%
Activator Adjusting Instrument (Without following the AMCT analysis protocol) -	-	-	86%	87%	90%
Other adjusting instrument	-	25%	23%	32%	34%
Applied Kinesiology (AK)	44%	50%	52%	46%	46%
Bio Energetic Synchronisation Technique (B.E.S.T.)	14%	13%	13%	7%	8%
Chiropractic Biophysics Technique (CBP)	-	16%	14%	14%	9%
Cox Flexion Distraction Technique	14%	16%	20%	15%	18%
Cranial Adjusting	-	62%	67%	68%	73%
Diversified Technique (DT)	90%	95%	98%	93%	98%
Extremity adjusting	-	90%	95%	94%	96%

Gonstead Technique	82%	80%	81%	75%	73%
Logan basic	30%	46%	45%	35%	28%
Meric	7%	11%	13%	12%	10%
Neuro Emotional Technique (NET)	9%	15%	25%	22%	30%
Network Spinal Analysis	18%	14%	19%	18%	21%
NIMMO / Receptor tonus	46%	41%	43%	27%	19%
Palmer upper cervical / HIO	24%	20%	42%	48%	43%
Pierce-Stillwagon	7%	12%	16%	6%	4%
Sacro Occipital Technique (SOT)	58%	71%	74%	58%	64%
Thompson Technique	68%	74%	79%	70%	81%
Torque Release Technique (TRT)	2%	12%	15%	16%	16%

Non-Adjustive Procedures

Respondents were asked to indicate how often they perform or utilise a variety of non-adjustive procedures.

Non-Adjustive Procedure	*Never*	*1-6 times per year*	*About once per month*	*About once per week*	*About once per day*	*Several times per day*
Acupuncture / Meridian Therapy	82%	6%	3%	2%	2%	5%
Bracing with lumbar support, cervical collar, etc.	74%	16%	5%	4%	1%	0%
Heel lifts or foot orthotics	66%	19%	10%	5%	0%	1%
Corrective or therapeutic exercises	20%	5%	7%	18%	15%	35%
Taping/strapping	54%	20%	11%	8%	5%	1%
Ice pack / Cryotherapy (in clinic)	68%	14%	8%	6%	2%	1%
Ice pack / Cryotherapy (home use)	31%	13%	16%	23%	9%	8%
Heat pack / Moist heat (in clinic)	82%	7%	6%	1%	4%	0%
Heat pack / Moist heat (home use)	37%	12%	13%	20%	9%	8%
Massage therapy (by chiropractor)	59%	10%	6%	6%	5%	15%
Massage therapy (by referral)	18%	14%	24%	26%	10%	8%

The table below compares the answers for this question between surveys with respect to the percentage of respondents that provided a positive response for each procedure.

Non-Adjustive Procedure	2004 SAC +ve response	2007 SAC +ve response	2010 SAC +ve response	2013 SAC +ve response	2016 SAC +ve response
Acupuncture (Combined with Meridian therapy in 2010 survey)	13%	12%	-	-	-
Meridian therapy (Combined with acupuncture in the 2010 survey)	17%	17%	-	-	-
Acupuncture / Meridian Therapy	-	-	20%	22%	18%
Bracing with lumbar support, cervical collar, etc.	42%	46%	32%	30%	26%
Heel lifts or foot orthotics	58%	48%	44%	37%	34%
Corrective/Therapeutic exercises	89%	94%	92%	83%	80%
Taping/strapping	30%	32%	39%	34%	46%
Ice pack / Cryotherapy (in clinic)	39%	30%	25%	24%	32%
Ice pack / Cryotherapy (home use)	81%	85%	78%	72%	69%
Heat pack / Moist heat (in clinic)	28%	12%	29%	13%	18%
Heat pack / Moist heat (home use)	70%	70%	70%	64%	63%
Massage therapy (by chiropractor)	46%	46%	43%	42%	41%
Massage therapy (by referral)	83%	88%	94%	83%	82%

Sales to Patients

Respondents were asked to indicate how often they sold various items to patients. This question was not included in the 2010 SAC survey but was re-introduced in the 2013 survey.

Items Sold to Patients	Never	1-6 times per year	About once per month	About once per week	About once per day	Several times per day
Nutritional supplements	39%	6%	20%	12%	7%	16%
Homeopathic remedies	78%	8%	3%	5%	1%	4%
Pillows	52%	12%	16%	18%	1%	1%
Braces & Supports	72%	9%	9%	7%	1%	2%

Orthotics	78%	8%	8%	5%	1%	0%

The table below compares the answers for this question between surveys with respect to the percentage of respondents that provided a positive response for each portion of the question.

Items Sold to Patients	*2004 SAC +ve*	*2007 SAC +ve*	*2013 SAC +ve*	*2016 SAC +ve*
Nutritional supplements	38%	58%	55%	61%
Homeopathic remedies	15%	15%	21%	22%
Pillows	54%	62%	44%	48%
Braces & Supports	33%	36%	30%	28%
Orthotics	29%	30%	22%	22%

Professional Referrals

Respondents were asked to indicate how frequently they have received or made referrals from, or to, various health professions.

Referred <u>FROM</u> Others	*Never*	*Rarely (<1 per month)*	*Sometimes (1-3 per month)*	*Often (1-2 per week)*	*Routinely (>2 per week)*
Acupuncturist	43%	33%	13%	6%	6%
Another Chiropractor	17%	50%	28%	3%	1%
Dentist	69%	25%	5%	1%	0%
Nurse Practitioner	67%	20%	10%	3%	0%
General Practitioner	21%	46%	29%	3%	1%
General Surgeon	83%	14%	1%	1%	0%
Massage Therapist	14%	37%	32%	13%	3%
Midwife	37%	32%	24%	4%	2%
Neurologist	90%	9%	1%	0%	0%
Neurosurgeon	91%	9%	0%	0%	0%
Nutritionist	72%	18%	8%	1%	0%
OB/GYN	93%	6%	1%	0%	0%
Orthopaedic Surgeon	81%	17%	1%	0%	1%
Paediatrician	90%	10%	0%	0%	0%
Physiotherapist	42%	39%	15%	3%	1%
Podiatrist	73%	19%	8%	0%	0%
Psychologist / Psychiatrist	89%	8%	3%	1%	0%
Radiologist	91%	7%	1%	1%	0%

Referred TO Others	Never	Rarely (<1 per month)	Sometimes (1-3 per month)	Often (1-2 per week)	Routinely (>2 per week)
Acupuncturist	21%	44%	22%	9%	4%
Another Chiropractor	5%	60%	30%	3%	2%
Dentist	53%	40%	5%	1%	0%
Nurse Practitioner	82%	13%	4%	1%	0%
General Practitioner	8%	29%	49%	12%	2%
General Surgeon	79%	16%	3%	3%	0%
Massage Therapist	10%	23%	32%	27%	9%
Midwife	68%	20%	10%	2%	0%
Neurologist	66%	30%	4%	0%	0%
Neurosurgeon	84%	13%	2%	0%	0%
Nutritionist	51%	26%	18%	5%	1%
OB/GYN	90%	9%	1%	0%	0%
Orthopaedic Surgeon	59%	27%	12%	2%	0%
Paediatrician	77%	19%	4%	0%	0%
Physiotherapist	19%	43%	31%	5%	1%
Podiatrist	53%	30%	16%	1%	0%
Psychologist / Psychiatrist	72%	21%	6%	1%	0%
Radiologist	35%	18%	27%	11%	9%

The table below compares the answers for this question between surveys with respect to the percentage of respondents that receive referrals from the other health professionals listed 'at least sometimes.'

Referred FROM Others	2007 SAC +ve response	2010 SAC +ve response	2013 SAC +ve response	2016 SAC +ve response
Acupuncturist	41%	51%	49%	57%
Another Chiropractor	89%	93%	88%	83%
Dentist	39%	40%	34%	31%
Nurse Practitioner	-	48%	43%	33%
General Practitioner	95%	91%	83%	79%
General Surgeon	14%	26%	18%	17%
Massage Therapist	88%	90%	81%	86%
Midwife	-	67%	58%	63%
Neurologist	12%	15%	10%	10%
Neurosurgeon	-	11%	6%	9%
Nutritionist	-	33%	24%	28%

OB/GYN	11%	14%	6%	7%
Orthopaedic Surgeon	-	23%	21%	19%
Paediatrician	11%	18%	8%	10%
Physiotherapist	13%	55%	51%	58%
Podiatrist	-	38%	28%	27%
Psychologist / Psychiatrist	13%	21%	16%	11%
Radiologist	8%	15%	11%	9%

The table below compares the answers for this question between surveys with respect to the percentage of respondents that have made referrals to the other health professionals listed at least sometimes.

Referred TO Others	*2007 SAC +ve response*	*2010 SAC +ve response*	*2013 SAC +ve response*	*2016 SAC +ve response*
Acupuncturist	69%	82%	70%	79%
Another Chiropractor	93%	95%	92%	95%
Dentist	53%	66%	48%	47%
Nurse Practitioner	-	20%	11%	18%
General Practitioner	94%	98%	95%	92%
General Surgeon	26%	36%	18%	21%
Massage Therapist	92%	99%	90%	90%
Midwife	-	39%	34%	32%
Neurologist	53%	48%	34%	34%
Neurosurgeon	-	27%	18%	16%
Nutritionist	52%	52%	44%	49%
OB/GYN	26%	18%	15%	10%
Orthopaedic Surgeon	67%	48%	47%	41%
Paediatrician	34%	24%	18%	23%
Physiotherapist	74%	72%	70%	81%
Podiatrist	-	56%	51%	47%
Psychologist / Psychiatrist	28%	40%	29%	28%
Radiologist	58%	60%	66%	65%

Health Promotion

Respondents were asked to indicate for what percentage of patients did they utilise a range of health promotion and wellness procedures.

Health Promotion and Wellness Procedures	Never	1-6 times per year	About once per month	About once per week	About once per day	Several times per day
Changing risky/unhealthy behaviours	3%	7%	9%	15%	27%	39%
Disease prevention/early screen advice	10%	10%	16%	25%	20%	19%
Ergonomic/postural advice	1%	1%	6%	13%	20%	59%
Nutritional/dietary recommendations	4%	4%	10%	24%	26%	32%
Physical fitness/exercise promotion	1%	1%	3%	17%	30%	48%
Relaxation/stress reduction recommendations	3%	3%	8%	14%	30%	42%
Self-care strategies	2%	3%	3%	11%	24%	57%
Spinal Health Class/Workshop	48%	21%	17%	8%	1%	4%
In House Newsletter	54%	23%	19%	1%	0%	3%
Email Newsletter	51%	23%	23%	1%	0%	2%
Mailed Newsletter	91%	6%	2%	0%	0%	1%

Health promotion activities appear to be remaining consistent across the past three surveys as indicated by the table below. The only activity that has changed significantly since the 2007 survey is the use of email newsletters which has increased from 23% to 49% in 2016 and a decrease in mailed newsletters which has dropped from 27% to 9%.

Health Promotion and Wellness Procedures	2007 SAC +ve response	2010 SAC +ve response	2013 SAC +ve response	2016 SAC +ve response
Changing risky/unhealthy behaviours	100%	100%	98%	97%
Disease prevention/early screen advice	90%	90%	94%	90%
Ergonomic/postural advice	100%	100%	98%	99%
Nutritional/dietary recommendations	97%	97%	98%	96%
Physical fitness/exercise promotion	100%	100%	99%	99%

Relaxation/stress reduction recommendations	99%	99%	98%	97%
Self-care strategies	99%	97%	98%	98%
Spinal Health Class/Workshop	48%	49%	56%	52%
In House Newsletter	54%	47%	46%	46%
Email Newsletter	23%	41%	45%	49%
Mailed Newsletter	27%	26%	17%	9%

Accident Compensation Corporation (ACC)

ACC Acceptance and Invoicing

Respondents were asked to indicate whether they accept ACC patients in their practice and, if yes, how they invoice these patients. The percentage of respondents invoicing electronically continues to rise.

Question	*2004 SAC 'Yes'*	*2007 SAC 'Yes'*	*2010 SAC 'Yes'*	*2013 SAC 'Yes'*	*2016 SAC 'Yes'*
Do you accept ACC patients?	95%	96%	94%	92%	97%
Do you lodge claims electronically?	15%	23%	42%	41%	65%
Do you invoice electronically?	15%	29%	56%	63%	77%
Do you have patients pay you and claim back from ACC themselves?	-	11%	13%	11%	2%

Percentage of ACC

Respondents were asked to indicate what percentage of their practice was made up of patients subsidised by ACC. The results across all surveys remain consistent over time.

Percentage ACC in Practice	*2004 SAC Survey*	*2007 SAC Survey*	*2010 SAC Survey*	*2013 SAC Survey*	*2016 SAC Survey*
Average	29%	32%	32%	31%	35%
Median	-	30%	30%	30%	32%
Range	0-80%	0-90%	0-85%	0-95%	5-100%

Referral of ACC Patients

Respondents were asked what percentage of their ACC patients were self-referred, medical referrals or referred by other treatment providers.

Referral Method	*2007 SAC Survey*	*2010 SAC Survey*	*2013 SAC Survey*	*2016 SAC Survey*
Self-referred	78%	70%	81%	78%
Medical referral	14%	22%	12%	11%
Referred by other treatment provider	8%	8%	6%	11%

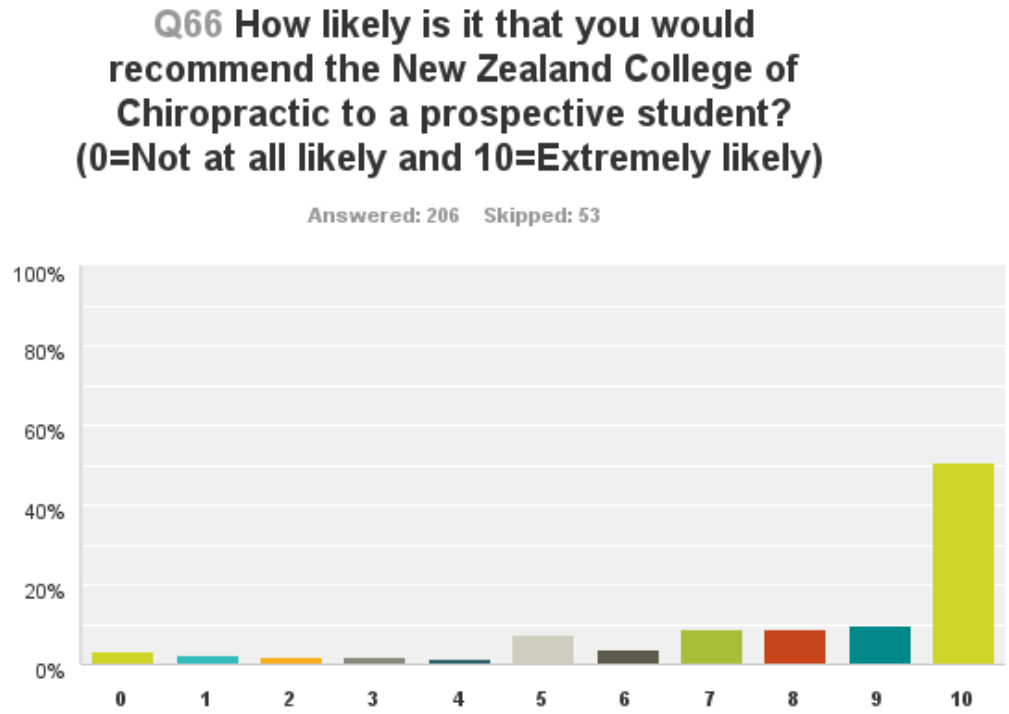
Research

For the first time in 2016, respondents were asked about their attitude to research and how they use research in practice. Ninety-nine percent of respondents indicated they think research is important for the profession, and 88% indicated that they use research in their practice. However, only 79% indicated that they know how to access research to use in their practice.

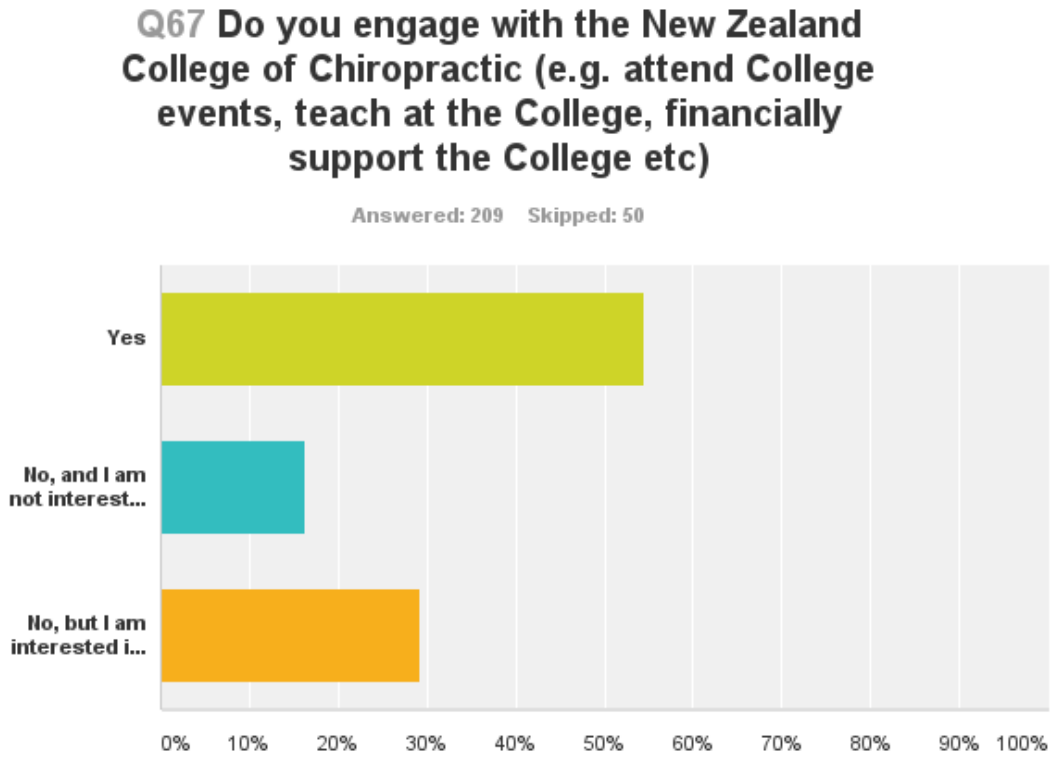
The New Zealand College of Chiropractic

This section of the survey asked respondents for their opinions regarding the College and graduates from the College. It also asked NZCC graduates to comment on their perception of their education at the College.

To obtain a 'net promoter score' relating to the College, respondents were asked to indicate how likely is it that they would recommend the New Zealand College of Chiropractic to a prospective student. This is the first time this question has been asked in the SAC Survey. Fifty percent of respondents indicated that they were extremely likely to recommend the College to a prospective student. The net promoter score was calculated by subtracting detractors (scores of 0-6) from promoters (scores of 9-10). The 2016 College net promoter score was 78. Net promoter scores of over 50 are generally considered to be excellent.



The College attempts to engage with stakeholders, so a question was introduced in the 2016 survey that asked if respondents engage with the College. Fifty-five percent of respondents do engage with the College, 16% do not engage and are not interested in engaging, and 29% do not engage but are interested in engaging with the College.



The next questions in this section asked respondents to indicate their opinion regarding the following statements:

'NZCC graduates have the required TECHNICAL skills to be a good practitioner'

'NZCC graduates have the required ATTITUDE (empathetic, ethical, respectful, constructive, responsible and accountable) to be a good practitioner'

'NZCC graduates have the required KNOWLEDGE to be a good practitioner'

2016 SAC Survey

Statement	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
NZCC graduates have the required TECHNICAL SKILLS to be a good practitioner'	3%	7%	7%	51%	33%
NZCC graduates have the required ATTITUDE to be a good practitioner'	3%	7%	13%	46%	32%
NZCC graduates have the required KNOWLEDGE to be a good practitioner'	1%	7%	10%	51%	31%

2013 SAC Survey

Statement	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
NZCC graduates have the required TECHNICAL SKILLS to be a good practitioner'	0%	9%	17%	47%	27%
NZCC graduates have the required ATTITUDE to be a good practitioner'	0%	4%	19%	42%	35%
NZCC graduates have the required KNOWLEDGE to be a good practitioner'	1%	10%	17%	41%	30%

2010 SAC Survey

Statement	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
NZCC graduates have the required TECHNICAL SKILLS to be a good practitioner'	0%	10%	13%	45%	32%
NZCC graduates have the required ATTITUDE to be a good practitioner'	0%	5%	15%	43%	37%
NZCC graduates have the required KNOWLEDGE to be a good practitioner'	1%	6%	12%	50%	31%

Respondents continued to be supportive overall regarding the technical skills, attitude, and knowledge of NZCC graduates. Respondents were asked to elaborate on their opinions of

NZCC graduates if they wished. Responses ranged from exceptionally supportive through to scathing assessments of the College.

Respondents were asked to give their opinion of how successful NZCC graduates are that they know? They were told to consider success to be a synonym for fulfilment which may encompass a wide range of areas such as being philosophically grounded, technically competent, mastered internal and external communication, high level of marketing / business expertise, awareness of and contribution to community and professional responsibilities.

2016 SAC Survey

Level of Success	*All NZCC graduates I know*	*The majority of NZCC graduates I know*	*About half the NZCC graduates I know*	*Less than half the NZCC graduates I know*	*Only a few of the NZCC graduates I know*	*None of the NZCC graduates I know*
Wildly Successful	4%	30%	20%	18%	27%	2%
Acceptably successful	4%	28%	32%	21%	13%	1%
Not quite successful	2%	4%	21%	38%	22%	13%
Struggling	0%	8%	11%	12%	58%	11%
Failures	0%	1%	1%	4%	49%	44%

2013 SAC Survey

Level of Success	*All NZCC graduates I know*	*The majority of NZCC graduates I know*	*About half the NZCC graduates I know*	*Less than half the NZCC graduates I know*	*Only a few of the NZCC graduates I know*	*None of the NZCC graduates I know*
Wildly Successful	4%	29%	26%	18%	22%	1%
Acceptably successful	8%	33%	24%	23%	11%	1%
Not quite successful	0%	7%	26%	20%	30%	17%
Struggling	0%	5%	15%	13%	50%	18%
Failures	0%	0%	1%	3%	38%	57%

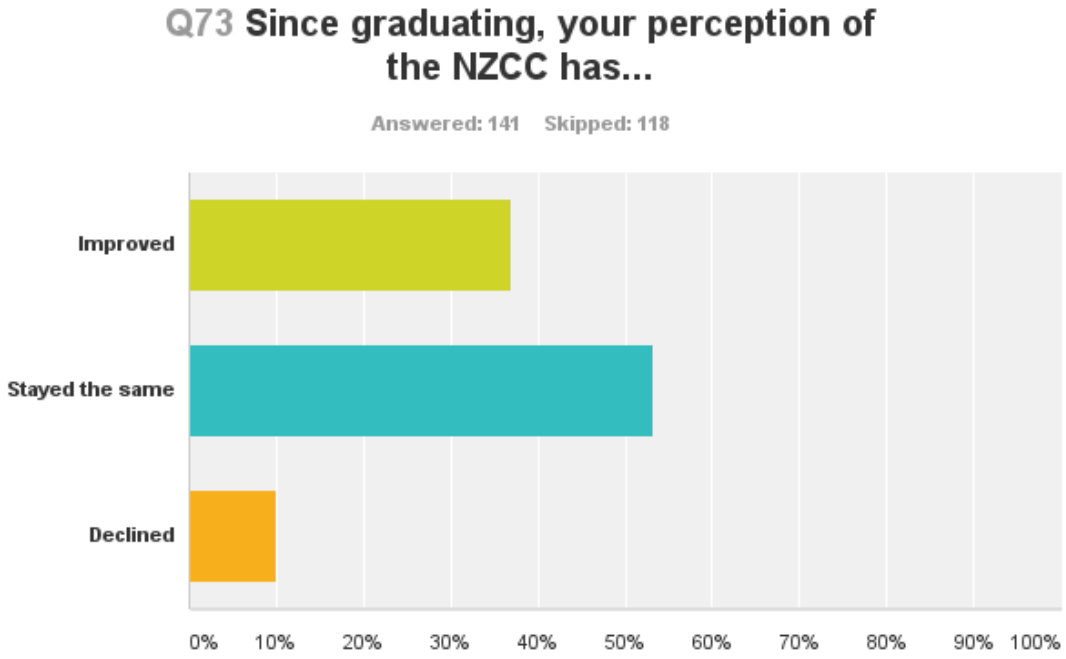
2010 SAC Survey

Level of Success	*All NZCC graduates I know*	*The majority of NZCC graduates I know*	*About half the NZCC graduates I know*	*Less than half the NZCC graduates I know*	*Only a few of the NZCC graduates I know*	*None of the NZCC graduates I know*
Wildly Successful	0%	12%	16%	19%	42%	11%
Acceptably successful	4%	38%	31%	23%	3%	1%
Not quite successful	2%	3%	14%	31%	45%	5%
Struggling	1%	3%	12%	16%	54%	13%
Failures	0%	0%	0%	2%	39%	59%

College graduates were asked to indicate in what areas they felt the College prepared them well for practice. Overwhelmingly, College graduates indicated the technique programme prepared them well for practice. Another consistent theme was that the philosophy they learnt at the College also prepared them well for practice.

College graduates were also asked to indicate how the College could have better prepared them for practice. The most consistent theme for this question is graduates would have liked to have been better prepared for many aspects of running and growing a business.

The last question asked of College graduates was whether their perception of the College had improved, stayed the same, or declined since graduating. Thirty-seven percent of graduates indicated their perception had improved, 53% hadn't changed their perception, and 10% indicated their perception had declined.



Class of 2013

The final section of the survey focused on the class of 2013. The College was asked by the Tertiary Education Commission to provide extra information about graduates who completed their studies in 2013 (or early 2014, i.e. those respondents who were eligible to attend the 2014 graduation ceremony). Forty-one respondents were from the class of 2013 from a class size of 57 graduates.

The TEC were interested in the income of graduates in their second year in practice, whether they were working and whether they were engaged in further study. The median income bracket for the class of 2013 in their second year in practice was $60,000-$80,000. Ninety-five percent of the class of 2013 were working in 2015, and 31% were engaged in further study.

Q28 What was your total income last year?

Answered: 33 Skipped: 8