



Occupational Therapy
Board of New Zealand

TE POARI WHAKAORA NGANGAHAU O AOTEAROA

FOSTERING FAITH AND CONFIDENCE IN THE PROFESSION

The Occupational Therapist Workforce

MAKING SENSE OF
THE NUMBERS



Authors: Fiona Stokes and Hugh Dixon

All work is done, and services rendered at the request of, and for the purposes of the client only. Neither BERL nor any of its employees accepts any responsibility on any grounds whatsoever, including negligence, to any other person.

While every effort is made by BERL to ensure that the information, opinions and forecasts provided to the client are accurate and reliable, BERL shall not be liable for any adverse consequences of the client's decisions made in reliance of any report provided by BERL, nor shall BERL be held to have given or implied any warranty as to whether any report provided by BERL will assist in the performance of the client's functions.

©BERL

Reference No: #5826

August 2018

Contents

	Making sense of the numbers	4
1	Introduction	7
	Knowledge gaps about the workforce	8
2	A competent workforce	11
	The five competencies	12
	Areas and gaps needing further support	13
3	The importance of diversity in the workforce	14
	Age diversity	15
	Gender diversity	15
	Cultural diversity	16
	Professional diversity	17
4	Issues in the workplace	19
	Training to become an occupational therapist	20
	Occupational therapist assistants	23
	Working in rural areas	24
	Reasons for leaving	25
	Barriers to re-entry	26
5	The changing occupation	27
	Future demand for occupational therapists	28
	Technology	28
	Domestic influences	30
	Global influences	33
6	Scenario projections	35
	BAU scenario	36
	Service demand scenario	36
	Scenario projection numbers	37
	Appendices	38
	Appendix A – References	38
	Appendix B – The Occupational Therapy Board of New Zealand	39
	Appendix C – Scopes of practice	40
	Appendix D – Workforce survey results: practising certificate	41
	Appendix E – Workforce survey results: no practising certificate	56
	Appendix F – Private employers survey	66

Making sense of the numbers

Occupational therapists increase and transform people's participation in occupation. They promote and improve well-being, health and social outcomes. Occupational therapists work with individuals, families, whānau, communities, organisations and populations to enhance their tino rangatiratanga (self-determination), ensure equality and enable occupational justice.

In New Zealand, all practising occupational therapists are legally required to be registered with the Occupational Therapy Board of New Zealand (OTBNZ) and hold a current practising certificate. OTBNZ is a responsible authority under the Health Practitioners Competence Assurance Act 2003.

Where are occupational therapists employed?

Currently, the largest areas of employment for occupational therapists in New Zealand are within the district health boards (DHBs), with 49% of registered occupational therapists employed within this setting, followed by private practice at 23% of the workforce. The remaining 28% of the workforce are employed across a variety of settings including within non-government organisations (NGOs), government agencies, education providers and private rest homes and hospitals.

Occupational therapists in DHBs work in multidisciplinary teams that can include nurses, doctors, physiotherapists, dietitians and speech-language therapists. These teams can work within hospitals and in the community or interface with community service providers. Within DHBs, 58% of occupational therapists work in physical health, 27% work in mental health, 6% work in paediatrics and youth services and the remaining 9% work in addiction, disability and other sectors.

Occupational therapists employed in private practice predominantly work in physical health (67% of the workforce). Vocational rehabilitation is an area of practice for 10% of those in private practice, while 5% work in brain injury or pain management. The remaining 18% of occupational therapists in private practice work in other areas, including youth services and palliative care. Overall, 80% of occupational therapists working in vocational rehabilitation are privately employed. Many work on contract to the Accident Compensation Corporation (ACC) providing vocational rehabilitation services.

Almost 80% of occupational therapists working in the education sector are employed by tertiary education providers or government agencies, while 75% of occupational therapists working in the disability and development sector are employed by NGOs.

What are the main challenges faced within the profession?

The current occupational therapist workforce is 93% female and has an average age of 41, 34% of occupational therapists are under 40 and 6% of the workforce identify as Māori or Pasifika. Further diversity should be encouraged to enable occupational therapists to match the growing diverse population in New Zealand and therefore promote and improve well-being, health and social outcomes in our communities.

The largest number of occupational therapists are employed in the most populated parts of New Zealand. However, around 14% of New Zealand's population live in rural areas, and if minor urban areas are included, this proportion increases to be closer to 20% of New Zealand's population.

Occupational therapists working in rural areas face many challenges visiting clients in their homes, schools or workplaces compared to their colleagues in larger urban areas. These challenges can include:

- » the time spent travelling to and from clients' homes, schools and workplaces
- » the necessity to complete tasks outside of their scope of practice
- » a lack of support and at times supervision, with occupational therapists working predominantly alone
- » difficulties obtaining and maintaining accreditations and attending professional development courses
- » limited career pathways within small teams, particularly for those occupational therapists who want to move into more senior or management roles.

These challenges are also compounded by the higher percentage of older people living in rural areas.

OTBNZ requires that an occupational therapist wanting to re-register must prove their competency to the Board in the same way as anyone wanting to register for the first time. This requirement is a barrier to people wanting to re-enter the profession. Other common barriers are the competency requirements and the cost of registration.

Future workforce

Under a business as usual (BAU) scenario, occupational therapist numbers would increase from 2,435 in 2017 to 3,030 in 2030. This is an increase of 595 occupational therapists over the next 13 years.

A service demand scenario was also undertaken, where extra numbers of occupational therapists are needed to meet the increased demand for occupational therapist services arising from the increased numbers of elderly and people with chronic health conditions present in the New Zealand population by 2030. Under this service demand scenario, occupational therapists numbers would increase from 2,435 to 3,324 in 2030. This is an increase of 889 occupational therapists over the next 13 years – about 300 higher than projected under the BAU scenario.

Acknowledgement

BERL wishes to thank the following groups and individuals for their assistance during this project:

- » Peter Anderson, Executive Director, Occupational Therapy New Zealand Whakaora Ngangahau Aotearoa
- » David Tayler, Senior Workforce Analyst, Technical Advisory Services
- » Allison Plumridge, Director, Workforce Information and Projects, Technical Advisory Services
- » Sam Valentine, Project Manager, Strategic Workforce Services
- » Emmanuel Jo, Manager, Analytics, Health Workforce New Zealand and Ministry of Health
- » Dr Ellen Nicholson, Head of School, Occupational Therapy School, Auckland University of Technology
- » Penelope Kinney, Senior Lecturer, Occupational Therapy School, Otago Polytechnic
- » Narinder Verma, Lecturer and Fieldwork Associate, Occupational Therapy School, Otago Polytechnic
- » James Sunderland, Senior Lecturer, Occupational Therapy School, Otago Polytechnic
- » Jayne Webster, Senior Lecturer, Occupational Therapy School, Otago Polytechnic
- » Cassandra Hopkins, Director, Focus on Potential and Occupational Therapy Board Member
- » Carolyn Simmons-Carlsson, Allied Health Director, Auckland District Health Board
- » Joy Aiton, Clinical Manager, Grey Base Hospital
- » Lisa Hess, Senior Clinical Quality Advisor, Accident Compensation Corporation
- » Janice McIntyre, Senior Clinical Quality Advisor, Accident Compensation Corporation
- » Julie Notman, Occupational Therapist
- » Mary Culver, Occupational Therapist
- » Chris Tutty, Manager, Ministry of Education
- » Andrew Charnock, Chief Executive and Registrar, Occupational Therapy Board of New Zealand
- » Dr Megan Kenning, Advisor Policy, Standards and Risk, Occupational Therapy Board of New Zealand
- » Juanita Murphy, former Professional Advisor, Occupational Therapy Board of New Zealand
- » Occupational Therapy Board of New Zealand.

No member or group has been asked to endorse the contents of this report. Our acknowledgement of their assistance should not be read as such. The contents of this report are the sole responsibility of the authors and BERL.

Ethical statement

This research has drawn on survey data on occupational therapy practitioners who registered with OTBNZ in the 2016/17 year. The anonymity of these practitioners was respected, and all data remained confidential. Careful consideration was given to the use of this data to avoid harm to survey participants.

1 Introduction

The aim of this research is to provide OTBNZ with a better understanding of the current occupational therapist workforce and how this workforce could potentially change in the future. This understanding will assist OTBNZ to be proactive in ensuring the occupational therapist workforce are meeting their competencies and practising appropriately for bicultural Aotearoa New Zealand.

Occupational therapists increase and transform people's participation in occupation. They promote and improve well-being, health and social outcomes. Occupational therapists work with individuals, families, whānau, communities, organisations and populations to enhance their tino rangatiratanga (self-determination), ensure equality and enable occupational justice.

In New Zealand, all practising occupational therapists are legally required to be registered with OTBNZ and hold a current practising certificate. OTBNZ is a responsible authority under the Health Practitioners Competence Assurance Act 2003.

A bachelor's degree in occupational therapy (or an OTBNZ-recognised overseas equivalent qualification) is required to work as an occupational therapist in New Zealand. The 3-year bachelor's degree programme is available at Auckland University of Technology (AUT) and Otago Polytechnic. The AUT programme is at their northern campus in Northcote, Auckland. Otago Polytechnic offers its programme at the main campus in Dunedin or in Hamilton at the Waikato Institute of Technology (Wintec) campus.

Currently, the largest areas of employment for occupational therapists in New Zealand are within the district health boards (DHBs), with 49% of registered occupational therapists employed within this setting, followed by private practice at 23% of the workforce. The remaining 28% of the workforce are employed across a variety of settings including within NGOs, government agencies, education providers and private rest homes and hospitals.

Occupational therapists in DHBs work in multidisciplinary teams that can include nurses, doctors, physiotherapists, dietitians and speech-language therapists. These teams can work within hospitals and in the community or interface with community service providers. Within DHBs, 58% of occupational therapists work in physical health, 27% work in mental health, 6% work in paediatrics and youth services and the remaining 9% work in addiction, disability and other sectors.

Occupational therapists employed in private practice predominantly work in physical health (67% of the workforce). Vocational rehabilitation is an area of practice for 10% of those in private practice, while 5% work in brain injury or pain management. The remaining 18% of occupational therapists in private practice work in other areas, including youth services and palliative care. Overall, 80% of occupational therapists working in vocational rehabilitation are privately employed. Many work on contract to ACC providing vocational rehabilitation services.

Almost 80% of occupational therapists working in the education sector are employed by tertiary education providers or government agencies, while 75% of occupational therapists working in the disability and development sector are employed by NGOs.

Knowledge gaps about the workforce

OTBNZ, through its role as a responsible authority, collects the following data as part of the registration process:

- » Number of occupational therapists holding a current practising certificate.
- » Number of occupational therapists by gender.
- » Number of occupational therapists by age, from which the average age can be calculated.
- » Number of occupational therapist graduates who register for their first practising certificate.
- » Average number of years registered as an occupational therapist.
- » Area of employment of occupational therapists, including by organisation type (DHB, private provider or other).
- » Percentage of occupational therapists with conditions on their practising certificates, such as graduate, overseas qualified, returned to practice, supervision required and personalised condition.
- » Number of overseas qualified occupational therapists who apply each year to register in New Zealand.
- » Country of origin of overseas qualified occupational therapists.

Despite this data collection, OTBNZ has identified a number of gaps in its knowledge of the occupational therapist workforce. These gaps have led to the following research questions and the engagement of BERL:

- » Where and how does the occupational therapist workforce work, including practitioners who do not have the title occupational therapist?
- » What is the scope of practice for occupational therapists in education, youth services, social services (such as mental health and addiction services), Corrections and ACC?
- » How are the needs of Māori being addressed? What needs are not being met?
- » What role do occupational therapist assistants play? Who employs and monitors these assistants?
- » How do graduates integrate with the workforce?

- » What new roles could emerge? Will this work fit the current scope of practice and competencies?
- » How will the changing age and condition of clients affect the role and services provided by the workforce?
- » Where will this workforce practise in the future?

To assist OTBNZ, BERL has undertaken the following research steps:

1. Gathered and analysed existing data and information on the occupational therapist workforce.
2. Undertaken online surveys and interviews to fill data gaps and gain further information.
3. Using the information gained from the surveys and interviews, projected a scenario that reflects possible future changes in occupational therapist numbers compared to a BAU scenario.
4. Discussed the findings of the research with OTBNZ and presented the research findings as a report.

Step 1: Gathering existing data and information on the workforce

BERL initially sourced data from the two known sources of information on the occupational therapist workforce, Statistics New Zealand and OTBNZ.

From Statistics New Zealand, BERL sourced data from the 2013 Census of Population and Dwellings, which provided a total count of people employed as occupational therapists under the ANZSCO06 classification. Occupational therapists under this classification are defined as follows:

“Occupational therapists assess functional limitations of people resulting from illness and disabilities, and provide therapy to enable people to perform their daily activities and occupations. Registration or licensing may be required.”

In total, 1,800 people were employed as occupational therapists in March 2013. This represents a significant proportion (78%) of the 2,295 people who were registered with OTBNZ in 2013.

From the OTBNZ registration dataset, we know that, as of March 2017, there were 2,435 registered occupational therapists in New Zealand. Of this number, 2,231 were female and 204 were male. The average age of occupational therapists in New Zealand is currently 41 years old.¹

In addition to this data, BERL gathered information on the occupational therapist workforce from:

- » *DHB Occupational Therapy Workforce Assessment Report July 2017*
- » *Should I stay or should I go? Factors influencing retention of occupational therapists working in mental health services in New Zealand*
- » *New Zealand Health Strategy 2016*
- » *New Zealand Disability Strategy 2016–2026*
- » *Health of Older People Strategy 2002*
- » *World Federation of Occupational Therapists Bulletin*
- » *New Zealand Journal of Occupational Therapy*
- » *A Mental Health and Addiction Workforce Framework: A Whānau Ora Approach 2014–2017*
- » *ACC Annual Report 2016*
- » *'Ala Mo'ui Pathways to Pacific Health and Wellbeing 2014–2018*
- » *Te Hau Mārire Addiction Workforce Strategic Framework 2015–2025*
- » *Te Umanga Whakaora Accelerated Māori Occupational Therapy Workforce Development*
- » *An examination of the preparedness for practice of New Zealand new graduate occupational therapists.*

The information collected from these sources provided an initial overview of the occupational therapist workforce but was not sufficient to provide the answers to all of the questions this research sought to answer. Therefore, BERL gathered primary data to fill the information gaps that remained.

Step 2: Completing workforce surveys and interviews

BERL undertook two surveys of the workforce. The first survey focused on the registered occupational therapist workforce to provide a more complete picture of the current 2017 occupational therapist workforce.² For this survey, OTBNZ provided BERL with the email addresses of all registered occupational therapists.

In total, 3,472 individuals registered with OTBNZ were sent the survey invitation, of which 1,083 responded, and 1,059 completed the survey sufficiently to be included in the final dataset. These 1,059 survey responses represent a 31% response rate for the survey and ensure the information has only a 2.5% error level. Of the 1,059 individual responses, 934 responses were from individuals who hold a practising certificate, and 125 responses were from individuals who do not currently hold a practising certificate.

The survey included a number of open-ended subjective questions that were intended to bring out the thoughts and opinions of the respondents. For these questions, BERL analysed the answers and subjectively extracted the main themes and findings to be used in this report.

The second survey was of private employers of occupational therapists.³ Information on DHB-employed occupational therapists is available from reports produced by Technical Advisory Services and through interviews with DHB allied health directors and occupational therapist leaders within DHBs. Information on private employers, the second largest area of occupational therapist employment, is virtually non-existent. In total, 60 private employers of occupational therapists were identified and sent invitations to the survey, with 13 companies responding. From these responses, 10 companies provided sufficient data for analytical analysis.

1 Further data on the workforce can be found in the *Occupational Therapy Board of New Zealand Annual Report 2017*.

2 Detailed analysis of the workforce survey results can be found in Appendix D and Appendix E.

3 Detailed analysis of the private employer's survey results can be found in Appendix F.

In addition to the surveys, BERL interviewed representatives from:

- » Auckland University of Technology (AUT)
- » Otago Polytechnic
- » Auckland DHB
- » West Coast DHB
- » Occupational Therapy New Zealand
Whakaora Ngangahau Aotearoa
- » Health Workforce New Zealand
- » Ministry of Health
- » ACC
- » Private provider Focus on Potential
- » Technical Advisory Services
- » Ministry of Education.

The information gathered from these interviews and surveys informed some of the gaps in the available datasets.

Step 3: Scenario projections

Using all of the assembled information on the current and future demands for occupational therapists in New Zealand, BERL constructed two scenarios that project potential occupational therapist numbers out to 2030. The first scenario is a business as usual scenario, which projects occupational therapist numbers out to 2030 using the per annum growth rates experienced in total occupational therapist numbers between 2010 and 2017.

The second scenario uses all of the information gathered from interviews, surveys and policy documents to determine how the current and future demands for occupational therapists will potentially increase the demand for the services of occupational therapists and therefore the potential total number needed in New Zealand to match that increased demand.

The aim of these scenario projections is to provide OTBNZ with some idea of where occupational therapist numbers could head over the next 13 years if the profession continues to grow as it has over the last 7 years. Or if the demand for the profession grows as it potentially could given the projected increase in elderly and chronic health conditions in New Zealand and therefore the demand for occupational therapist services.

Step 4: Research findings and reporting

Using all of the assembled information, BERL undertook analysis of all the gathered data to seek answers for the research questions and objectives. As a result of this analysis, BERL has determined that there are four main themes to our findings:

- » Achieving diversity in the occupation.
- » Competency and practising appropriately in the workplace.
- » The roles of occupational therapists in the workplace.
- » The future of the occupation.

These themes are explored in this report, after first setting out the occupational therapy competencies that set occupational therapists aside from other health occupations.

2

A competent workforce

OTBNZ's vision is to lead national and international best practice in the regulation of occupational therapy competence in New Zealand, based on our unique bicultural identity.

To ensure this vision is met, OTBNZ sets standards, monitors and promotes competency and continuing professional development and ensures proper conduct in the practice of occupational therapy in the interests of public health and safety. OTBNZ undertakes this monitoring through various measures, including practising certificates and ePortfolios.

The five competencies

Occupational therapists are committed to addressing individual and systemic barriers to people's participation in occupation. These barriers can be cultural, educational, environmental or social or related to health, disability or spirituality.

OTBNZ states that, for occupational therapists to undertake their professional role, they need to show they have and can maintain the following five competencies:

1. Applying occupational therapy knowledge, skills and values
 - You apply what you know. You engage with people and communities to enable occupations based on rights, needs, preferences and capacities. You work within the context of each client's environment to optimise their participation and well-being.
2. Practising appropriately for bicultural Aotearoa New Zealand
 - You treat people of all cultures appropriately. You acknowledge and respond to the history, cultures, and social structures influencing health and occupation in Aotearoa New Zealand. You take into account Te Tiriti o Waitangi The Treaty of Waitangi and work towards equal outcomes for all your clients.
3. Building partnerships and collaborating
 - You collaborate. You work well with other individuals, groups, communities and organisations. You use your own and others' resources, environment and skills to benefit your clients.
4. Practising in a safe, legal, ethical and culturally competent way
 - You act with integrity. You include safety, legal, ethical, and cultural requirements and expectations in your professional practice, and apply them to your work.
5. Engaging with and being responsible for your profession
 - You engage with your profession. You ensure your practice is professional, current, responsive, collaborative, and evidence-based.

Occupational therapists stated in our survey that the most common way to maintain all of these competencies is through undertaking relevant courses, training and ongoing supervision. This shows that the OTBNZ requirement for all practising occupational therapists to have a supervisor is important. Supervision is one of the most common ways for occupational therapists to ensure they are maintaining their competencies and continuing to develop professionally.

Interviews with Otago Polytechnic and AUT indicated that postgraduate study is on the rise, with one of the most commonly studied areas being vocational rehabilitation. This study area is heavily influenced by ACC contract requirements for occupational therapists to have completed postgraduate studies in this area. Other popular areas of study are mental health and addiction, particularly among those occupational therapists already working or looking to work in these areas, and leadership and management for those occupational therapists engaged in or looking to engage in interdisciplinary work.

In the survey, BERL asked occupational therapists how they maintained the competency related to practising appropriately for bicultural Aotearoa New Zealand. While 35% of the survey respondents did not answer this question, those who did said the most common ways to maintain competency in this area included:

- » engaging in bicultural discussions, courses and training
- » discussions and engagement with Māori colleagues and advisors
- » and learning te reo Māori.

The settings that occupational therapists practise in vary. However, the philosophy and principles of occupational therapy do not. This means the scope of practice for occupational therapists across differing settings (education, youth services, social services, Corrections and ACC) are generally the same, and they maintain their competencies in a similar way.

Areas and gaps needing further support

Along with asking occupational therapists about how they maintain their competencies, BERL asked in what areas they need further support to maintain their competencies and where are the gaps in competencies that OTBNZ could assist occupational therapists in.

The main area that occupational therapists would like further support from OTBNZ is in undertaking professional development to maintain their competencies. They would like further support in accessing and finding appropriate courses, resources and training.

In particular, many occupational therapists would like to see OTBNZ run workshops, conduct webinars and provide easier access to appropriate training modules, courses and resources. A number of respondents also suggested that OTBNZ has a list of training courses available in New Zealand. This list could assist occupational therapists to find and access courses that would provide a substantial benefit to their professional development.

One of the most common responses from occupational therapists in regards to support was around the lack of time and funding to undertake professional development.

In addition, while a number of occupational therapists suggested they would like further support to help maintain all five competencies, survey respondents would mainly like further support from OTBNZ in practising appropriately for bicultural Aotearoa New Zealand.

Overall, occupational therapists' responses to these two questions show that, while they understand the need for and want to undertake professional development, it is a struggle for them to identify, find and access appropriate courses and resources. They would like to see more support from OTBNZ in these areas to assist them to better maintain their competencies.

Q&A

What is the scope of practice for occupational therapists in education, youth services, social services, Corrections and ACC?

From interviews conducted by BERL, the scope of practice is the same no matter where occupational therapists are working. It is more what they are doing that changes by workplace, with occupational therapists working in these areas more focused on non-physical therapy than those who work in public hospitals or private practices.

Therefore, the gaps and issues identified were the same for those occupational therapists employed by the Ministry of Education and ACC as for those who are employed by DHBs and private practices.

3

The importance of diversity in the workforce

The occupational therapist profession is a female-dominated occupation, with 93% of occupational therapists being female in 2017. Given this, how does the occupational therapy profession match the diversity of the clients it serves, along with the current New Zealand population? This diversity includes age diversity, gender diversity, cultural diversity and professional and employment diversity.

Age diversity

The average age of registered occupational therapists is 41 years. Information from the *Occupational Therapy Board of New Zealand Annual Report 2017* indicates that this average age has remained fairly stable over the last 5 years.

The BERL survey further reinforces this finding by showing that 33% of the workforce are aged 41–50, while 34% are aged 40 or under. The remaining 33% of surveyed occupational therapists are over 50. This is the age profile of registered occupational therapists who hold a practising certificate (PC).

Individuals who do not hold a PC but are registered with OTBNZ have a younger age profile, with 43% under 40 and 34% over 50. The likely reasons for this include young occupational therapists working overseas maintaining their registration but not their PC and female occupational therapists in their late 20s or 30s who have young families and have retained their registration to enable them to rejoin the occupational therapist workforce.

Around 70% of students currently training to be occupational therapists are secondary school leavers. This will help to maintain the current age diversity in the registered occupational therapist workforce. However, the challenge will be to encourage those who do not hold a PC but remain registered with OTBNZ to regain their PC and re-enter practice.

Gender diversity

Occupational therapy is a female-dominated occupation, with 2,231 of the 2,435 registered occupational therapists in New Zealand being female.

The dominance of a single gender in a workforce can lead to public perceptions that only that gender can undertake this profession. In the case of occupational therapy, this can make it harder to attract males to become occupational therapists, and it can make it harder for the general public to change their perceptions and accept male occupational therapists as they expect their occupational therapist to be female.

The occupational therapy schools are aware of the gender imbalance in the profession and are trying to attract and retain more male students. Both schools noted the difficulties of retaining male students throughout the programme, as they are often attracted to other areas of health.

Otago Polytechnic, for example, ensures that at least one of the placements a male student undertakes is with a male occupational therapist. This allows male students to ask questions, establish and build networks, gain role models and understand more about the profession.

Cultural diversity

The current occupational therapist workforce does not match the population that the profession represents. Greater diversity is needed to balance this mismatch and enable occupational therapists to support more people and their whānau in the community.

OTBNZ and the occupational therapy schools need to broaden awareness of the profession and actively encourage greater diversity. Throughout our research, BERL found that students enrolling in the occupational therapist programme have a personal connection to the profession prior to enrolling. This is often a family member or family friend who is an occupational therapist or they or a family member may have been treated by an occupational therapist.

This may be problematic in the case of encouraging young Māori and Pasifika people to enter the profession due to the low numbers of potential role models. The *Occupational Therapy Board of New Zealand Annual Report 2017* indicates there were 98 Māori and 37 Pasifika registered occupational therapists. This means that Māori make up just 4% of all registered occupational therapists, while Pasifika occupational therapists represent 2%. These numbers are well below the 15% of the total New Zealand population who are of Māori ethnicity and the 7% who are of Pasifika ethnicity.

To turn these figures around, AUT and Otago Polytechnic have programmes in place to increase cultural diversity in the workforce and attract a greater number of Māori and Pasifika students. However, if the above holds true, more Māori and Pasifika role models will be needed to encourage more young people to enter the profession.

OTBNZ recognises the need for cultural diversity in the profession with the inclusion of the competency related to practising appropriately for bicultural Aotearoa New Zealand. Because of this competency, occupational therapists were also asked in the survey if they spoke another language apart from English.

From the survey, it was found that 17% of occupational therapists speak a second language or in some cases a third and even fourth language. Of those that speak a second language, 37 different languages were noted, with the most common being French, German, te reo Māori, Afrikaans, Dutch and Spanish.

Q&A

How are the needs of Māori being addressed? What needs are not being met?

From interviews with the occupational therapist schools, the schools are highly aware of the lack of Māori occupational therapists, and increasing the number of Māori students is one of their priorities. Generally, both schools will give Māori students priority entry into the courses and will try and work with the students to retain them in the occupational therapist school.

From interviews with Māori and non-Māori occupational therapists, one of the key reasons that students choose to enter occupational therapy is personal role models. This puts pressure on Māori occupational therapists to be role models and to spend time raising the awareness of the profession to Māori.

OTBNZ recognises the need for cultural diversity in the profession with the inclusion of the competency related to practising appropriately for bicultural Aotearoa New Zealand to ensure that all occupational therapists are able to treat Māori clients in an appropriate way given the low number of Māori occupational therapists.

Professional diversity

Professional diversity is around who employs occupational therapists (public, private, NGOs or other employers) and in what areas occupational therapists are working (physical health, mental health, education or other areas).

From the BERL survey of occupational therapists who hold a practising certificate (PC), 49% of occupational therapists are employed by DHBs, with a further 26% employed by private providers, 10% by government agencies such as ACC and Corrections and the remaining 14% employed by NGOs, education providers and other organisations.

We also know that 51% of occupational therapists work in physical health, 18% in mental health, 9% in education, 4% in youth services and the remaining 17% across addiction, vocational rehabilitation, pain management, brain-related trauma, palliative care, paediatrics, and disability and development.

Looking deeper into the workplace settings for employed occupational therapists shows that 38% spend at least part of their work in a community setting, 35% are at a public hospital and 34% visit clients in their homes, and rounding out the top five settings are private practice facilities and schools.

The predominant work setting of occupational therapists employed by DHBs is public hospitals, with 87% employed in this setting. This is followed by 51% in community settings and 44% based mainly in clients' homes. Of note, the 81% of occupational therapists who work in a mental health facility or addiction facility are employed by a DHB.

For those occupational therapists employed in private practice, the main work setting is private practice facilities at 82%. This is followed by 54% working in clients' homes and 54% in community settings.

In addition, 72% of occupational therapists employed by a DHB and 58% of occupational therapists employed by a private provider work an average of at least 30 hours a week.

As part of the survey, occupational therapists who hold a PC were asked about their job title. Of the 934 PC survey respondents, 74% had a job title that included the terms occupational therapist or occupational therapy. Of the 26% of PC holders who did not have occupational therapist in their job title, the most common job titles were clinical needs assessor, wheelchair and seating therapist, hand therapist and neurodevelopmental therapist or their job title included the terms team leader or manager.

The occupational therapist workforce that is registered but does not hold a PC is predominantly employed within DHBs, at 43%, while a further 31% are employed in the private sector. A further 8% of this workforce is employed within government agencies such as ACC and Corrections, and the remaining 18% are employed across NGOs, education providers and other organisations.

Approximately 63% of the registered workforce who do not hold a PC are employed as occupational therapists. Given that an individual must have a PC to work as an occupational therapist in New Zealand, these individuals are most likely working overseas as occupational therapists. The remaining 27% of the registered non-PC workforce who do not work as occupational therapists are employed as co-ordinators, managers, consultants or educators or are retired or out of work.

Q&A

Where and how does the occupational therapist workforce work, including practitioners who do not have the title occupational therapist?

From the survey of occupational therapists who hold a PC, 49 were employed by DHBs, and a further 26 were employed by private practices. Across all PC-holding occupational therapists, 38% spend at least part of their work week in a community setting, 35% are at a public hospital and 34% visit clients in their home.

The survey found that 74% of the occupational therapist workforce have the term occupational therapist as part of their job title. The remaining 26% of work mainly as clinical needs assessors, wheelchair and seating therapists, hand therapists, neurodevelopment therapists and managers. These individuals work mainly in community settings (40%), at clients' homes (30%) and at public hospitals (30%).

4

Issues in the workplace

From discussions and interviews and the survey of occupational therapists and occupational therapist employers, BERL noted that there are a number of issues within the workplace for occupational therapists. These include the ability of new graduates to enter the workforce, the requirement to work full-time versus the desire from some to work part-time, the role of occupational therapist assistants and the support they provide occupational therapists, the reasons why occupational therapists leave the workforce and the barriers occupational therapists face when re-entering the workforce.

Training to become an occupational therapist

In New Zealand, people looking to become occupational therapists need to study on a 3-year bachelor's degree programme at one of the two tertiary providers who offer the degree. These tertiary providers are Auckland University of Technology (AUT) and Otago Polytechnic, which offers the degree at both their Dunedin and Hamilton campuses.

NCEA level 3 (18 credits) and university entrance is required to enter the bachelor's programme. However, neither school has specific school subject requirements. Students will study anatomy, physiology and kinesiology, so it is useful if they have studied health science and physical education at school. They also need academic writing skills to formulate arguments in their assessments, and soft skills such as communication and listening skills, people skills and empathy are important.

In 2015, the Ministry of Education recorded there were 640 occupational therapy students enrolled across the 3 years of the bachelor's programme. These enrolments were across both of the schools. In the same year, 165 students across both schools completed their bachelor's degree.⁴

Otago Polytechnic enrolls approximately 110 first-year students across its Hamilton and Dunedin campuses, while AUT enrolls around 120 first-year students. The number of first-year students each school enrolls is limited by staff numbers and student clinical placements.

Attraction and attrition

The number of students that can enrol and study to become an occupational therapist is restricted by the size of the tertiary provider, the number of staff they can employ, the number of courses they can offer and classroom availability. Enrolments are also restricted by the number of clinical placements. Students who study at Otago Polytechnic, for example, complete 1,000 hours of supervised placements over 3 years. Approximately 115 students per annum need to be put into placements nationwide, with 65–70 placements required for students from the Dunedin campus and 45–48 placements required for students from the Hamilton campus. These placements also need to be across different areas of practice to ensure students get a variety of experience.

Both schools work through their careers office and general enrolment information with local high schools to promote the occupational therapy profession as a career choice. For both schools, the main source of first-year students is secondary school students who transition into tertiary study, although around 30% of first-year students at AUT are special admissions.⁵ These are students who took a gap year or people looking to change career.

Both schools have attrition in their programmes, particularly between the first and second years, and have taken steps to try and minimise the number of students leaving the programmes. Since 2008, Otago Polytechnic has employed specialist support staff to help support students who might be struggling and also offer students 1 year's leave from the programme with their place held, allowing students who might have experienced a health or family issue to rejoin the programme at a later point.

The schools teach a curriculum that provides a solid grounding in occupational therapy theory and practical skills. At the moment, there is pressure on the schools to provide a higher level of specialisation, especially for those students working in DHBs or mental health, but the schools are unable to offer this as part of their current bachelor's programmes.

⁴ The 2015 calendar year was the latest year for which data was available from the Ministry of Education.

⁵ From interview with AUT Head of School Dr Ellen Nicholson.

One of the largest parts of the occupational therapy bachelor's programme is clinical placements, with students needing to complete 1,000 hours across the 3 years of study. Both schools have their students complete their first clinical placement in semester two. This also impacts on attrition as some students begin to better understand what the role involves.

AUT places the bulk of its students with DHBs in the upper North Island including Northland, the three Auckland DHBs, Waikato and the Bay of Plenty. The DHBs then place the students in hospitals, along with placements with NGOs, private providers, private hospitals and other role-emerging places within the DHB area. The DHBs generally employ a placement leader who places the student.

For Otago Polytechnic, the placements are across New Zealand with the polytechnic co-ordinating the placement with private providers, DHBs, NGOs and other providers.

There is a growing demand for postgraduate study. The number of occupational therapists returning to study in a particular field, such as mental health and addiction, has led to the development of new courses such as Te Pou new entry to specialist programmes, vocational rehabilitation programmes with ACC, leadership and management papers for interdisciplinary work and doctoral studies.

Who employs graduates

The schools believe there is a strong demand from employers for graduate occupational therapists because of the different roles that occupational therapists can be employed in. The schools note that employers understand that graduates are at the starting point in their knowledge, and while they meet the minimum requirements for competencies, they will need help to further develop their skills.

Most graduates have a gap between completing their study, applying for their practising certificate and beginning work. The academic year is generally February through to mid-November, with most applying for provisional registration and work in mid-December. This means mid-December through to April is when most new graduates are looking for work.

New graduates are employed by DHBs, private providers, government agencies and NGOs. Some employers approach the schools to employ new graduates at the end of the year.

Most DHBs employ a small number of graduates annually. For example, Auckland DHB employs three graduates each year and has an 18-month graduate programme that the graduates enter. They then rotate through the DHB hospital setting in the first 12 months, before being rotated to a community setting for the last 6 months.

Our survey indicates that 40% of private providers employ graduates, and of this number, only one-third have a specific programme in place to support these graduates.

Interviews with private providers revealed that some do not take on new graduates. This is because of the ACC contracts they hold, which often require the occupational therapist working for the private provider to have at least 3 years' experience. These private providers tend to recruit occupational therapists from DHBs and other providers who are looking to work part-time or have more flexible work hours.

The survey asked occupational therapists and private providers how well equipped they think occupational therapist graduates are to deal with the demands of the workplace.

Approximately 50% of occupational therapists thought new graduates were adequately equipped to deal with the demands of the workplace, with 20% thinking they were well or very well equipped. The remaining 30% thought graduates were ill-equipped or very ill-equipped to deal with the demands of the workplace.

The survey respondents were then asked in what areas graduates could improve their competencies. The responses focused on time management, particularly case load management and interdisciplinary team work. These were the two most noted areas where graduate training could be improved.

Approximately 67% of private providers who employ new graduates thought they were adequately equipped to deal with the demands of the workplace. The remaining 33% thought graduates were ill-equipped.

The private providers that were interviewed understood that new graduates often lacked specialised skills but that graduates were keen to learn and develop their skills in the specific areas needed by their employer. Private providers who employed new graduates also indicated their plans to use more experienced

occupational therapists to supervise and help these graduates grow into their roles. This is a similar finding to our discussion with the schools.

Occupational therapists were also asked in the survey how well equipped they thought graduates were to deal with the demands of future workplaces. Of these responses, 27% of occupational therapists thought graduates were well or very well equipped to deal with future workplaces, 48% thought they were adequately equipped and 26% thought they were ill-equipped or very ill-equipped to deal with the future workplace.

From the information gathered, it can be concluded that employers perceive graduates as being well equipped for the future work environment. They have a strong knowledge base regarding the profession but need to build their specialist skills and experience. This is where employers noted improvements could be made to assist graduates to be work ready.

Q&A

How do graduates integrate with the workforce?

From our survey of the occupational therapist workforce, it was noted that around 70% of current occupational therapists thought graduates were at least adequately prepared for the demands of the workforce. Most DHBs and even some private providers run their own graduate programmes to ensure that the graduates they take on are well equipped for the demands of their particular workplaces.

Evidence from the occupational therapy schools showed that there was strong demand for graduates in the New Zealand workforce and that, while graduates would need extra training to work in highly specialised fields, graduates were able to meet the competency requirements for practising in New Zealand.

Occupational therapist assistants

Occupational therapist assistants and aides help clients develop, recover, improve and maintain the skills needed for daily living and working. Occupational therapist assistants work with occupational therapists providing support activities.

In New Zealand, no formal training or qualifications are needed to undertake the role of occupational therapist assistant. Most DHBs provide training for occupational therapist assistants, but this is often site-specific and cannot be transferred between DHBs. In comparison, occupational therapist assistants in the USA are certified to undertake this role.

From the BERL survey of occupational therapists, around 36% of occupational therapists work with occupational therapist assistants. Of these occupational therapists, 87% work in the DHB sector, while 5% work for a private provider. The remaining 8% work in other sectors. Of those occupational therapists that work with an occupational therapist assistant, 73% are working in physical health with a further 11% working in mental health.

Technical Advisory Services undertook a 2017 workforce assessment of the occupational therapist workforce employed by DHBs. This work also covered

the role of occupational therapist assistants within the DHBs. This research found that DHBs want to delegate more work to occupational therapist assistants, particularly in the area of community care. Here, some DHBs would like to send occupational therapist assistants to perform first visits and get them accredited to issue aids to clients in the community.

To meet the gap in the lack of formal training needed to undertake an occupational therapist assistant role, many DHBs are looking to develop a consistent approach to training and establishing a competency base for assistants using the Calderdale Framework. An increasing number of DHBs are also putting occupational therapist assistants through the Careerforce National Certificate in Health and Wellbeing (Level 3) Health Assistance Strand.

In DHBs, occupational therapists undertake the assessment of a client, and then the assistant does the programme devised by the occupational therapist with the client. The occupational therapist assistant is supervised by a registered practitioner.

Lastly, the Technical Advisory Services research revealed that occupational therapist assistants who are recruited from overseas to work in DHB roles are often qualified physiotherapists who cannot get accreditation in New Zealand. This leads to additional workplace challenges in regards to the delegation of work.

Q&A

What role do occupational therapist assistants play? Who employs and monitors these assistants?

In New Zealand, occupational therapist assistants work with clients to develop, recover, improve and maintain the skills needed for daily living and working by taking clients through the programme devised for them by an occupational therapist. Occupational therapist assistants are overseen by a registered occupational therapist who monitors the progress of the clients.

At present, the majority of occupational therapist assistants are employed by DHBs to provide support to occupational therapists and enable them to focus solely on tasks and activities that lie in their scope of practice.

Working in rural areas

Occupational therapy is an allied health profession. As such, the largest number of occupational therapists are employed in the most populated parts of New Zealand.

Our survey of occupational therapists, for example, found that the largest number of occupational therapists work in the Auckland, Canterbury and Wellington regions followed by the Waikato, Otago and Bay of Plenty regions. The smallest number of occupational therapists work on the West Coast and in Southland – two of the smallest region by population but not by size.

Around 14% of New Zealand's population live in rural areas. If minor urban areas (towns with a population of fewer than 10,000 people) are included, this proportion increases to closer to 20% of New Zealand's population. These smaller towns include areas such as Greymouth, Kaitaia, Motueka, Alexandra and Te Anau.

Areas such as Northland (outside of Whangarei), Wairarapa, Tararua, Whanganui and Ruapehu Districts, South Waikato, the West Coast and Southland are sparsely populated with small towns and settlements scattered throughout these areas. Occupational therapists face many challenges visiting clients in their homes, schools or workplaces in these areas compared to their colleagues in larger urban areas. These challenges are also compounded by the higher percentage of older people living in rural areas.

These challenges can include:

- » the time spent travelling to and from clients' schools, homes and workplaces
- » the necessity to complete tasks outside of their scope of practice
- » a lack of support and at times supervision, with occupational therapists working predominantly alone
- » difficulties obtaining and maintaining accreditations and attending professional development courses
- » difficulties recruiting occupational therapists and keeping them in roles due to limited career pathways within small teams – this is particularly difficult for occupational therapists who want to move into more senior or management roles.

These challenges were noted several times in our research but are best highlighted using the West Coast DHB as an example. For the entire West Coast DHB region, covering from Karamea to Haast, there is a team of 12 occupational therapists. The region comprises around 23,000 square kilometres of land, stretching over 500 kilometres north to south, and has a population density of 1.4 people per square kilometre. For occupational therapists based at the base hospital in Greymouth, this means journeys of up to 300 kilometres one way to reach clients' homes in the furthest areas of the region.

This team of occupational therapists may be keen to make use of new technology to connect more efficiently to people who live more remotely away from Greymouth, Hokitika and Westport. However, many of their clients do not have the technology themselves to enable the occupational therapists to make use of this new technology. This means that, for the foreseeable future, the main way occupational therapists on the West Coast will visit clients will continue to be in their own homes, and they will drive long distances to get there.

It is often necessary for occupational therapists at the West Coast DHB to do a wide range of tasks, including non-occupational therapist tasks, when they visit clients as the resources are not always available.

Occupational therapists who have specialist knowledge and skills can find it difficult and isolating to work in such a rural setting, as they can be the only occupational therapists in an area able to do this type of specialist work. This also means that there may be no one to cover for them if they want to go on holiday or if they were ill.

The ability to obtain and maintain accreditation for many specialist tasks and roles can be difficult for occupational therapists in rural settings such as the West Coast. This is also compounded by the limited number of cases requiring this level of specialisation. For the West Coast region, there is only one specialist role – a paediatric therapist. Otherwise, the team needs occupational therapists with more general skills, as this allows them to undertake a wider variety of occupational work in the region.

These challenges also mean that, while the DHB can recruit new graduates, they often struggle to consolidate their knowledge while working alone for much of their day and travelling around the region. This also limits the ability of these graduates to access support from other members of the occupational therapy team. On the other hand, if graduates are comfortable working under these conditions, the opportunity to work in a small occupational therapy team is rewarding. This is because every team member has a wide variety of work available to them, and most occupational therapists within the team are generalists rather than specialists.

Reasons for leaving

Annual registration data from OTBNZ shows that, in 2017, 21% of registered female occupational therapists had been registered for longer than 26 years and 21% had been registered for 16–25 years.

Given that 92% of registered occupational therapists are female, this research explored the main reasons why occupational therapists leave the profession. The survey found that the most common reason is parental leave, with just over 40% of occupational therapists noting this reason. Working conditions and career change were the next most noted reasons, with 30–40% of occupational therapists noting these as reasons for leaving the profession.

The survey of private providers revealed a similar result, with 63% of providers noting parental leave as the most common reason for occupational therapists to leave their employment. A change of career and going overseas, were the next most common reasons, noted by 25% of private providers.

Given the long length of registration of female occupational therapists, it is likely they often retain their occupational therapy registration but not their practising certificate when starting their families.

This was reinforced by interviews with private providers who noted that around 80% of their occupational therapists who have a child return to work for the company. Many of these private providers noted they could offer their occupational therapists part-time work or flexible hours, which their staff could fit around caring for their family.

Occupational therapists may also move from working in a DHB to a private practice as they may want to work part-time. Interviews with DHBs revealed that often occupational therapists wishing to start families left their employment because DHBs could generally not offer part-time work. In a hospital environment, it is difficult to negotiate part-time hours due to continuity of care and working in a multidisciplinary team. Working in private practice offers flexibility in terms of work hours. In addition, a number of occupational therapists resign and give up work entirely while they add to and raise their family. This can be because their area of expertise is not conducive to the private providers, the benefits or part-time work do not outweigh the costs or a number of other reasons.

Growth in areas of the profession, such as vocational rehabilitation work funded by ACC could help to retain more experienced occupational therapists who have previously left the profession to have families. This is because this type of work is generally undertaken by private providers who are happy to employ occupational therapists part-time.

Of more concern to the profession are those occupational therapists who leave to change career or due to their working conditions. Occupational therapists who leave for these reasons will generally be more difficult to retain and therefore harder to lure back into the profession if the demand for occupational therapists increases substantially in the future.

Apart from occupational therapists going on maternity leave, another unexplored reason for leaving is to work overseas. Evidence from the occupational therapist workforce survey and from interviews is that there are a number of occupational therapists who work overseas – including new graduates, those with only a few years' experience and even greatly experienced occupational therapists. The most common countries to work in are Australia, Ireland and the UK. Given that the Australian and New Zealand Occupational Therapy Boards recognise each other's qualifications, an occupational therapist does not need to undertake any further training to practise in Australia. For the UK, an occupational therapist needs to provide their academic record and a certificate of good standing from OTBNZ and sit a competency exam before commencing practice.

Barriers to re-entry

OTBNZ requires that an occupational therapist wanting to re-register must prove their competency to OTBNZ in the same way as anyone wanting to register for the first time. This requirement is to ensure that people registered as occupational therapists in New Zealand meet a high standard of competency.

Unless they have maintained their registration and practising certificate in New Zealand, an occupational therapist returning to work in New Zealand must prove to OTBNZ that they are competent to practise. This can be frustrating to an occupational therapist as it requires writing to OTBNZ and explaining how they meet each of the five competencies, providing examples that show their competency and providing references from their occupational therapist employment overseas. As noted in a few interviews, this can feel frustrating as the process is the same regardless of whether they spent their entire time overseas working as an occupational therapist or sitting on a beach doing nothing.

Given these requirements, this research explored what the barriers are to re-entering the occupational therapy profession and how significant the re-registering process is in comparison to other identified factors.

The survey of occupational therapists revealed that 51% saw the registration requirements set out by OTBNZ as the most common barrier to people re-entering the profession, followed by competency requirements at 49% and the cost of registration at 39%.

The other potential barriers highlighted by the survey were salary, noted by 28%, and the hours of work, noted by 19%. In addition, a number of survey respondents noted that, when occupational therapists are away from the profession for a while, they can lose confidence in their abilities and have difficulties updating their knowledge and skills.

Overall, we can conclude that occupational therapists currently registered with OTBNZ see the cost and requirements of re-registering as the main potential barriers to de-registered occupational therapists re-entering the profession.

5

The changing occupation

As of 2016, the World Federation of Occupational Therapists (WFOT) noted that New Zealand has five occupational therapists per 10,000 people, while the Technical Advisory Services report on the DHB occupational therapist workforce noted that the number of DHB-employed occupational therapists per 100,000 people has remained steady since 2010.

Of the 74 countries who reported 2016 numbers to WFOT, New Zealand placed 13th in the number of occupational therapists per 10,000 people. The country with the most occupational therapists per 10,000 people was Denmark with 15, followed by Faroe Islands with 12, Sweden with 11, Australia with seven, the UK with six and the USA and Canada with four. Overall, New Zealand has a similar level of occupational therapists per capita as most other comparable countries.

Future demand for occupational therapists

While much of our research has focused on what is currently happening in the occupational therapist workforce, it is also important to look at where the profession is headed.

To do this, BERL considered the current and potential future demand for occupational therapists in New Zealand, how new technology will affect the occupational therapist workforce and what domestic and global influences will affect the occupational therapist workforce.

In New Zealand, there is already a growing demand for occupational therapists in areas such as mental health and addiction, aged care and general practice dealing with preventable health problems such as obesity and type 2 diabetes. Here, the challenge remains how primary care is funded.

To look at the demand for occupational therapists in the future, BERL asked current occupational therapists if they thought there would be an increased demand for occupational therapists in the future and what would influence this demand. Overall, 88% of current occupational therapists believed there will be a greater demand for occupational therapists in the future, with the main influences noted being New Zealand's ageing population, a greater awareness of the skills an occupational therapist has to offer, a move within the health sector to a community focus with an emphasis on helping people to stay out of hospital and increasing numbers of people dealing with mental health issues.

In terms of areas of practice, occupational therapists believe there will be a greater demand for their skills in non-traditional work areas such as local government and accessibility, urban design and accessibility, social and community services (particularly homelessness, poverty and housing) and child services. Occupational therapists also believe that, in the future, they will begin to work more with people who are healthy and well in addition to those who need assistance.

Technology

How will advances in technology affect the future occupational therapist workforce? Will it make the profession obsolete, will it make the job easier/harder or will it enable occupational therapists to work better and more efficiently?

Current occupational therapists see the impact of technology affecting the occupational therapist workforce in three ways.

The first is how technology can enable occupational therapists to undertake consultation and assessments remotely through video calling, online or via virtual clinics. This technology is available, but its use is limited by the local infrastructure that is available to support it including within clients' homes.

Video calling has been around for some time, but many people living in remote locations, where video calling would be a more efficient use of an occupational therapist's time, do not have the required technology at their end to enable this. New technology may supersede existing technology in this area, but this could have a limited impact in enabling access to population groups with the highest needs.

The second area where technology could have an impact is in record keeping. This again is currently available technology. However, the impact of this technology is currently limited due to the slow uptake of electronic medical records by DHBs and other medical professions. This is key to the success of improved record keeping. The use of technology here would allow occupational therapists to access and update client medical records.

Overall improvements in technology in these first two areas will enable occupational therapists to better perform their jobs and provide people with better access to an occupational therapist.

The third area where technology could impact on the occupational therapist workforce is in assistive technologies. This is an area where rapid improvements and new technologies are the most likely to come about in the next few years, as noted by a number of occupational therapists. This area of assistive technology is incredibly broad as it could include robotic technology such as bionic limbs and voice-activated devices using smartphone or tablet apps and robot carers capable of monitoring people's health.

This impact could be felt in the occupational therapist workforce in a number of ways, including the need for occupational therapists to be trained in the new technology so they can use it to better assist their clients and undertake their roles in a faster and more efficient way. It could also make occupational therapists' jobs harder as clients may expect more technological assistance to be available, with the internet and social media allowing them to be more aware of what is available overseas such as the advancement in the US of bionic limbs.

The occupational therapist workforce will therefore need to keep up to date with what new assistive technologies are becoming available. However, in many cases, the introduction of new assistive technology will be heavily dependent on public health funding in New Zealand.

Q&A

Where will this workforce practise in the future?

It is likely that occupational therapists' services will need to move more away from hospitals and private practice settings to working more in and with their communities. In addition, with advances in technology, occupational therapists will need to use that technology to enable them to provide their service in clients' homes via remote connections.

Domestic influences

As explored earlier in this report, 76% of occupational therapists in New Zealand work for either a DHB or a private employer, but who employs occupational therapists is only part of where and how they work in the New Zealand health system. From our survey of occupational therapists, we know that 35–40% spend part of their working week at one or more of a public hospital, community setting or a client's home. With the changing needs of the population through migration, ageing and chronic health conditions, how and where occupational therapists work will potentially need to change away from hospital and private practice settings towards community settings, clients' homes, general practices and other settings that would enable the public to access occupational therapist services more easily with a view to preventing health issues rather than managing them.

So what currently does or potentially will influence the demand for occupational therapists in New Zealand?

Immigration

New Zealanders' needs and expectations are changing because the population is ageing and becoming more ethnically diverse. In Auckland, for instance, around 39% of residents were born overseas. Asian populations are growing the fastest and now represent almost one in four people living in Auckland.

According to Statistics New Zealand, over the last 5 years, New Zealand has averaged a net 56,000 increase in our population from international migration. Most new migrants are coming to New Zealand from China, India, Southeast Asia and Europe.

Increasing immigration means there is likely to be an increasing number of occupational therapists' clients who are from different cultures. A number of occupational therapists have noted that they are moving from a bicultural to a multicultural approach to practice as they work with clients from a widening range of different cultures. They note the need for occupational therapists to be able to understand these different cultures in order to treat their clients in a more effective manner.

Q&A

How will the changing age and condition of clients affect the role and services provided by the workforce?

The changing age and condition of clients in New Zealand will affect the potential role and services provided by occupational therapists. New Zealand is expecting to see the elderly increase to 20% of the population, along with increasing numbers of young people and adults affected by chronic health problems.

It is likely that the demand for occupational therapists will increase to deal with the increased need from the elderly and those with chronic health problems, so the overall size of the workforce will need to increase. The role of occupational therapists is likely to move towards preventing health problems rather than helping people manage them, although occupational therapists' roles will change as their clients are likely to have an increasing array of mental and physical issues.

Ageing population

New Zealanders are living longer, and every year, more of us are aged over 65 years. Social and health services will have to adapt, and it challenges the health system to find ways of providing services that are still affordable.

According to Statistics New Zealand population projections, by 2028, there will be 1,050,000 New Zealanders aged over 65, compared to around 750,000 in 2018. People over 65 will increase their share of the total New Zealand population from 15% in 2018 to 19% in 2028.

Keeping an older person healthy and independent can involve more health and social services than are needed for younger people. Older people are also more likely to have a disability and to have more than one health condition. New Zealand wants a health system that supports people to live longer but also to spend more of that life in good health.

Dealing with long-term conditions is a particular challenge with an ageing population. Dementia is one example. The *New Zealand Health Strategy 2016* indicates that the number of New Zealanders with dementia is expected to rise from about 48,000 in 2011 to about 78,000 in 2026.

Chronic health conditions

Obesity is becoming more common and has long-term health and social impacts. Among New Zealand children, 10% are obese, but the rate is 30% in Pasifika children. Some of New Zealand's population groups do not benefit from the health and disability system as much as others. For example, while New Zealanders overall are living longer, Māori and Pasifika people still have lower life expectancies than the population as a whole.

People with an intellectual disability can also expect to live for 18–23 fewer years. Disabled people generally experience more health issues than the rest of the population. The *New Zealand Health Strategy 2016* states that 29% of disabled people rated their health as fair or poor compared with only 4% of non-disabled people.

Children are another population that may not access the health services they need because they depend on others for that access.

As in many other developed countries, diabetes is one of New Zealand's fastest-growing long-term conditions. Rising prevalence reflects a combination of factors, including rising incidence (true new cases), better detection of cases through increased screening, slower progression from uncomplicated to late-stage disease (which means mortality rates are lower) and demographic change (changing ethnic composition and population ageing).

The Ministry of Health's *Living Well with Diabetes: A plan for people at high risk of or living with diabetes 2015–2020* notes that:

- » an estimated 257,700 people in New Zealand had diabetes as at 31 December 2014 or 6% of the New Zealand population
- » the prevalence of diabetes has been rising at an average of 7% per year for the previous 8 years
- » the prevalence of diabetes is increasing across all ethnic groups and age groups, with the largest (relative) increases in diabetes among adults aged 25–44 years, and at least one in six (15%) adults aged 65 years and over has diabetes.

It further notes six priority areas for treating diabetes in New Zealand, three of which are focused on areas of service that would suit occupational therapists' scope of practice and competencies:

- » Focus on prevention and early intervention, including for mental health needs, to reduce the personal and social burden of disease.
- » Provide people-centred services, including for family and whānau when appropriate.
- » Focus on achieving effective self-management including responding to people's demand for technology-enabled tools.

Children and young people

According to Statistics New Zealand population projections, by 2028, there will be 980,000 New Zealanders aged under 15 compared to around 940,000 in 2018. People under 15 will decrease their share of the total New Zealand population from 19% in 2018 to 18% in 2028.

Special education teams (now called learning support) include occupational therapists, language therapists, physiotherapists and special education co-ordinators. The teams work with children with the most need. Previously, these were mainly children with physical disabilities, but this has moved to fewer children with physical disabilities and more children with mental disabilities.

The teams work to adapt the classroom to meet the needs of the child rather than trying to get the child to adapt to the classroom. For the occupational therapist, this often involves supporting the team around the child, which can include teachers and parents. Previously, there was one occupational therapist per special education team, but now there are often 1.4 occupational therapists in the team. This is due to the shift in focus to children with mental disabilities as adapting classrooms for mental disabilities requires more input from occupational therapists.

Funding models

The survey and interview responses revealed that many occupational therapists believe that the New Zealand health system has the wrong model in place.

The current medical model focuses on waiting for people to need treatment and then providing that treatment. Many stated that the medical model approach made it difficult for occupational therapists to fully undertake their role, which often involves helping people to avoid the need for medical treatment. A more social model is advocated that recognises occupational therapists can help people stay out of hospital rather than help people get back to what they were doing before their hospital stay.

Also noted in the survey responses was that many occupational therapists believe health funding and the limitations imposed by ACC legislation are the largest factors influencing the occupational therapist workforce. This is because most of the occupational therapist workforce are either employed directly by a DHB or, if employed privately, are dependent on service contracts from ACC and other government agencies.

Funding constraints have a large impact on the workforce. Many occupational therapists noted in the survey that the likely impact of funding constraints was to increase job dissatisfaction, increase pressure on occupational therapists, limit occupational therapists to making client assessments with occupational therapist assistants carrying out the hands-on therapy and limit the general population's access to occupational therapy services.

Other influences

Other domestic influences include:

- » health funding and Vote Health budget allocation
- » the New Zealand Health Strategy
- » public policy to reduce the amount of time clients spend in hospitals, with the aim for clients to finish their recovery at home rather than in hospitals
- » Tertiary Education Commission (TEC) funding of tertiary education and public policy regarding vocational training.

The amount of time that people spend in hospital before discharge in surgical and medical wards has decreased from 3 days to 2 days. This creates a challenge for occupational therapists as there is only a small window of opportunity to work with the client to recreate their home environment and work through assessments and potential interventions.

Global influences

The occupational workforce was asked through interviews and survey what global influences are currently affecting the New Zealand profession or what is likely to affect it in the near future.

The responses of occupational therapists can be split into three main categories:

- » Higher wages in Australia, the UK and other countries attracting New Zealand occupational therapists to work overseas.
- » Brexit and global instability attracting more people and more occupational therapists to move to New Zealand.
- » Rapid advances in technology that could assist the competency and tasks of occupational therapists.

Higher wages in other countries is not an issue for occupational therapists alone. This is the case for many medical and non-medical professions in New Zealand. Interviews with the New Zealand occupational therapist schools revealed that currently fewer than 10 graduate occupational therapists move to the UK annually. This is known because, as part of occupational therapist registration in the UK, schools are asked to provide details of the programme they offer. The schools also reported that similar numbers of graduates head to Australia once they have completed their qualification. Occupational therapists in the US are required to hold at least a master's qualification, and very few New Zealand-qualified occupational therapists head to the US.

In the case of New Zealand-qualified occupational therapist graduates heading overseas, many will be travelling for their OE and to see the world and are fortunate that their New Zealand qualification allow them to work overseas.

Of the current registered occupational therapists, 35% have worked overseas as an occupational therapist, with the UK and Australia the most popular countries to have worked in. Of these survey responses, 78% have worked for a period in the UK while 21% have worked in Australia.

Some of the occupational therapists who have worked overseas are likely to be overseas-trained occupational therapists who have moved to New Zealand. Others are occupational therapists who have travelled and worked overseas before returning to New Zealand.

Of those occupational therapists who have worked overseas, the average length of time spent working overseas was 5 years, with occupational therapists having spent as little time as 6 weeks through to 25 years, and with 2 years as the most common length of time spent working overseas. This coincides with the 2-year working holiday visa that is available to New Zealanders travelling to the UK.

Global instability, including events such as Brexit in UK and financial issues in Europe, have led many people to move to New Zealand in the last few years, with annual net immigration hitting 72,000 in 2017. This net immigration is increasing New Zealand's population at a faster rate than previous decades and means that New Zealand will likely need to increase the number of employed occupational therapists to maintain its ratio of occupational therapists per capita.

Along with the increased net annual immigration, New Zealand will also be more attractive to overseas-trained occupational therapists who wish to relocate to New Zealand. If this is the case and they are able to meet OTBNZ registration requirements, this could boost the number of trained occupational therapists in New Zealand.

Q&A

What new roles could emerge? Will this work fit the current scope of practice and competencies?

It is likely that new roles could emerge around the advances in assistive technology and the increasing complexity and number of elderly who will need occupational therapist care.

It is unknown whether new roles that emerge will be within the current scope of occupational therapist practice and competency, but occupational therapists could be ahead of the changes if they continually modify and adapt their competencies to meet the changing needs of the New Zealand population that they are working with and how and where they work with them.

6

Scenario projections

In this section, BERL has undertaken two scenario projections looking at the number of registered practising certificate-holding occupational therapists out to 2030. The driver of these scenario projections is the knowledge showcased in section 5 that occupational therapist services will be increasingly needed to help maintain the mobility, independence and occupation of the elderly, along with an increasing need to work with young people with chronic health issues and young people with mental disabilities. This means that, as the percentage of elderly as a share of the total New Zealand population increases, the number of occupational therapists per 10,000 people will need to increase to maintain their level of current services.

Therefore, the two scenario projections BERL has undertaken are:

1. business as usual (BAU) scenario
2. service demand scenario.

BAU scenario

Under the BAU scenario, BERL has projected a continuation of the average percentage change in occupational therapy numbers across the last 7 years. Between 2010 and 2017, occupational therapist numbers increased on average by 1.7% per year, increasing from 2,166 registered occupational therapists with a practising certificate in 2010 to 2,435 in 2017.

Using a 1.7% per annum growth in occupational therapists, by 2030 under the BAU scenario, the number of occupational therapists will reach 3,026.

In 2017, with 2,435 registered occupational therapists, there were 5.1 occupational therapists per 10,000 people in New Zealand. New Zealand's population as at June 2017 was estimated at 4,793,300. For our scenario projections, BERL has used Statistics New Zealand population projections at a national level, using the high migration population growth scenario. BERL has used these population projections rather than the median population projections because of the current high migration growth New Zealand is undergoing. This means the high migration population projections more closely reflect our current New Zealand population growth.

With the New Zealand overall population increasing by 1.3% per annum and the number of occupational therapists growing by 1.7% each year, this will see an increase to 5.4 occupational therapists per 10,000 people by 2030.

Service demand scenario

Under the service demand scenario, BERL has projected the potential number of occupational therapists who might be required given the increasing number of elderly in the New Zealand population who will require additional services along with the potential for more occupational therapists to work with the younger population in New Zealand with chronic health conditions.

BERL has used the Statistics New Zealand high migration population projections to provide the projected change in the numbers of those aged over 65 and under 15 between 2017 and 2030.

By assuming that each elderly person will require 50% more time from an occupational therapist than an average adult and each young person will require 20% more time, BERL can estimate the extra occupational therapists required to cater for New Zealand changing population. BERL multiplied this weighting by the number of people in each of the three groups – young people, adults and elderly – to provide a weighted population for each year between 2017 and 2030.

To determine the number of occupational therapists needed to service this population, BERL assumed a fixed constant of 5.2 occupational therapists per 10,000 people. This ratio of 5.2 was used by BERL as it is slightly above the 2017 ratio of occupational therapists to population.

Overall, BERL's projections of occupational therapists under this scenario see occupational therapists numbers rise from 2,435 in 2017 to 3,324 to 2030. This is a 2.4% per annum increase in occupational therapists between 2017 and 2030, with the number of occupational therapists per 10,000 people increasing from 5.1 in 2017 to 5.9 in 2030.

This increase in the required number of occupational therapists comes from an average 3.4% per annum increase in the elderly compared to the overall population increase of 1.3% per annum. This means that, by 2030, elderly people will comprise 20% of the New Zealand population compared to 15% in 2017 and are likely to require increased services from occupational therapists to maintain their mobility, independence and occupation.

Scenario projection numbers

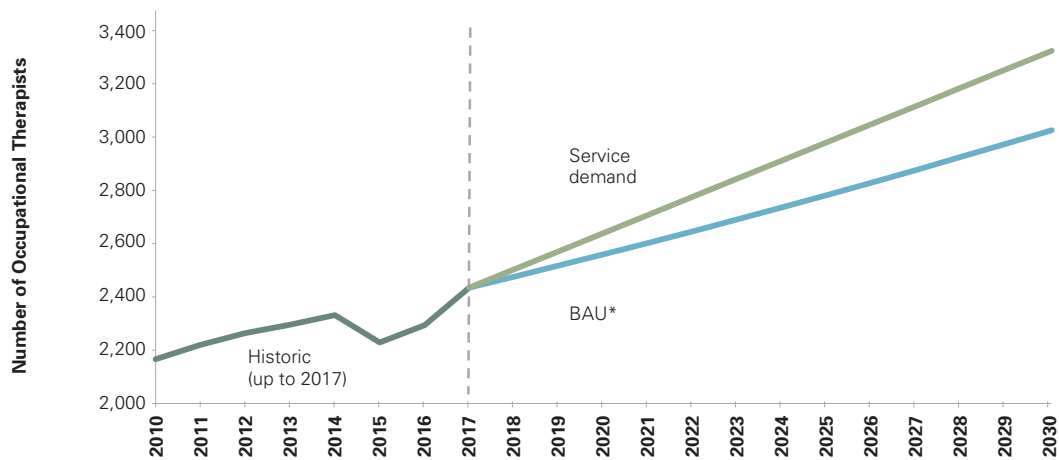
This graph shows the number of registered practising certificate-holding occupational therapists between 2010 and 2017 (historical series) along with the projected BAU and service demand scenario occupational therapist numbers.

Under the BAU scenario, occupational therapist numbers would increase from 2,435 in 2017 to 3,030 in 2030. This is an increase of 595 occupational therapists over the next 13 years. This means that, over the next 13 years, the total number of occupational therapists will increase on average by 45 per year.

Under the service demand scenario, occupational therapist numbers would increase from 2,435 to 3,324 in 2030. Under this scenario, the total number of occupational therapists would increase by 889 over the next 13 years. This means that, over the next 13 years, the total number of occupational therapists will increase on average by 68 per year.

By 2030, occupational therapist numbers under the service demand scenario would need to be around 300 higher than what is projected under the BAU scenario. This increase in occupational therapists would be needed to meet the projected demand for occupational therapist services arising from the increasing numbers of elderly and people with chronic health conditions in the future New Zealand population.

Scenario projections to 2030 for occupational therapists



* BAU – business as usual

Appendices

Appendix A References

- Accident Compensation Corporation. (2016). *ACC Annual Report 2016*. Wellington, New Zealand: Author.
- Ministry of Health. (2002). *Health of Older People Strategy 2002*. Wellington, New Zealand: Author.
- Ministry of Health. (2014). *'Ala Mo'ui Pathways to Pacific Health and Wellbeing 2014–2018*. Wellington, New Zealand: Author.
- Ministry of Health. (2015). *Living Well with Diabetes: A plan for people at high risk of or living with diabetes 2015–2020*. Wellington, New Zealand: Author.
- Ministry of Health. (2015). *Te Hau Mārire Addiction Workforce Strategic Framework 2015–2025*. Wellington, New Zealand: Author.
- Ministry of Health. (2016). *New Zealand Health Strategy 2016*. Wellington, New Zealand: Author.
- Ministry of Social Development. (2016). *New Zealand Disability Strategy 2016–2026*. Wellington, New Zealand: Author.
- Nayar, S., Blijlevens, H., Gray, M. & Moroney, K. (2011). *An examination of the preparedness for practice of New Zealand new graduate occupational therapists*. Auckland, New Zealand: Auckland University of Technology.
- Te Rau Matatini. (2009). *Te Umanga Whakaora Accelerated Māori Occupational Therapy Workforce Development*. Wellington, New Zealand: Author.
- Te Rau Matatini. (2014). *A Mental Health and Addiction Workforce Framework: A Whānau Ora Approach 2014–2017*. Wellington, New Zealand: Author.
- Technical Advisory Services. (2017). *DHB Occupational Therapy Workforce Assessment Report July 2017*. Wellington, New Zealand: Author.
- Webster, J. (2017). *Should I stay or should I go? Factors influencing retention of occupational therapists working in mental health services in New Zealand* (Master's thesis). Otago Polytechnic, Dunedin, New Zealand.
- World Federation of Occupational Therapists. (2016). *WFOT Human Resources Project 2016*. London, United Kingdom: Author.

Appendix B The Occupational Therapy Board of New Zealand

The Occupational Therapy Board of New Zealand is an appointed body corporate in accordance with the Health Practitioners Competence Assurance Act 2003 (the Act). As an authority under the Act, OTBNZ is responsible for the registration and oversight of occupational therapy practitioners.

The functions of OTBNZ are listed in section 118 of the Act as being to:

- a. prescribe the qualifications required for scopes of practice within the profession and, for that purpose, to accredit and monitor education institutions and degrees, courses of studies or programmes
- b. to authorise the registration of health practitioners under the Act and to maintain registers
- c. to consider applications for practising certificates
- d. to review and promote the competence of health practitioners
- e. to recognise, accredit and set programmes to ensure the ongoing competence of health practitioners
- f. to receive and act on information from health practitioners, employers and the Health and Disability Commissioner about the competence of health practitioners
- g. to notify employers, the Accident Compensation Corporation, the Director-General of Health and the Health and Disability Commissioner that the practice of a health practitioner may pose a risk of harm to the public
- h. to consider the cases of health practitioners who may be unable to perform the functions required for the practice of the profession
- i. to set standards of clinical competence, cultural competence and ethical conduct to be observed by health practitioners of the profession
- j. to liaise with other authorities appointed under this Act about matters of common interest
- k. to promote education and training in the profession
- l. to promote public awareness of the responsibilities of the authority
- m. to exercise and perform any other functions, powers and duties that are conferred or imposed on it by or under this Act or any other enactment.

Appendix C Scopes of practice

Occupational therapists are registered health professionals who use processes of enabling occupation to optimise human activity and participation in all life domains across the lifespan and thus promote the health and well-being of individuals, groups and communities. These life domains include learning and applying knowledge, general tasks and demands, communication, mobility, self-care, domestic life, interpersonal interaction and relationships, major life areas and community, social and civic life.

Enabling occupation incorporates the application of knowledge, principles, methods and procedures related to understanding, predicting, ameliorating or influencing peoples' participation in occupations within these life domains. Such practice is evidence-based undertaken in accordance with OTBNZ's prescribed competencies and code of ethics and within the individual therapist's area and level of expertise.

OTBNZ defines the practice of occupational therapy as follows:

1. Using processes of enabling occupation to promote health and well-being by working with individuals, groups, organisations, communities and society to optimise activity and participation across the lifespan and in all life domains.
2. Establishing relationships with clients/tangata whaiora and people associated with clients, based on an understanding of their occupational history, participation preferences and the personal, spiritual, family/whānau, social and cultural meanings of what they do.
3. Using interactive, observational and interpretive methods of enquiry to explore and understand the subjective meanings of occupation.
4. Assessing aspects of people, occupations and places relevant to the things people want, need and are expected to do, including:
 - a. personal factors, body structures and functions, activity limitations and occupational performance skills relative to the requirements for participation and developmental stage
 - b. past and present participation in occupation including the effectiveness of and satisfaction with that participation
 - c. routines and patterns of participation and their consequences for health and well-being
 - d. the components of occupation and the capacities, skills and resources required to participate in them
 - e. contexts of participation, including facilitators and barriers to participation in occupation, and culturally defined roles and meanings.
5. Working collaboratively with clients to:
 - a. identify and prioritise activity and participation goals at an occupational performance level in current and future environments
 - b. develop, preserve and restore capacity for participation, including body structures and functions and personal factors as these relate to skilful, effective and satisfying occupational performance
 - c. prevent or retard predictable deformity of body structures and/or disruption of body functions that might affect participation through educational approaches and by recommending and educating people in the use and care of assistive devices, garments and technologies
 - d. review participation choices in relation to enabling occupational performance
 - e. modify how, when, where and with whom activities and occupations are performed
 - f. modify physical, social and attitudinal environments to remove barriers to participation in occupation and strengthen facilitators of participation in occupation
 - g. develop a group, organisation or community purpose, resources, structure, functioning and/or skills to enable participation in occupation.
6. Engaging in processes to ensure competence in the above.
7. 'Practice' goes wider than clinical occupational therapy to include teaching/tutoring, professional and/or team leadership or health management where the person influences the practice of occupational therapy, in hospitals, clinics, private practices and community and institutional context whether paid or voluntary.

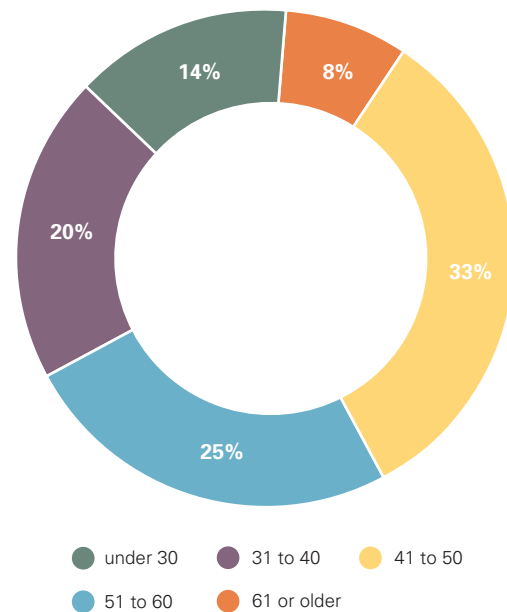
Appendix D Workforce survey results: practising certificate

In order to supplement the interviews and other research undertaken, BERL surveyed everyone registered with OTBNZ. These tables and graphs show the results of this workforce survey and include the responses from those individuals who hold a practising certificate.

1. Age

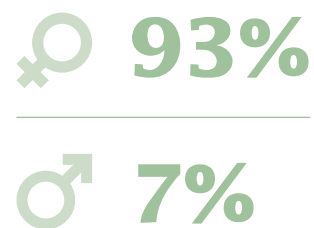
The largest single age group of occupational therapists is 41–50 with 33% of the workforce in this age group. This is followed by the 51–60 age group with 25% and the 31–40 age group with 20%.

Overall, 34% of the occupational therapist workforce are under 41, and 33% are over 50.



2. Gender

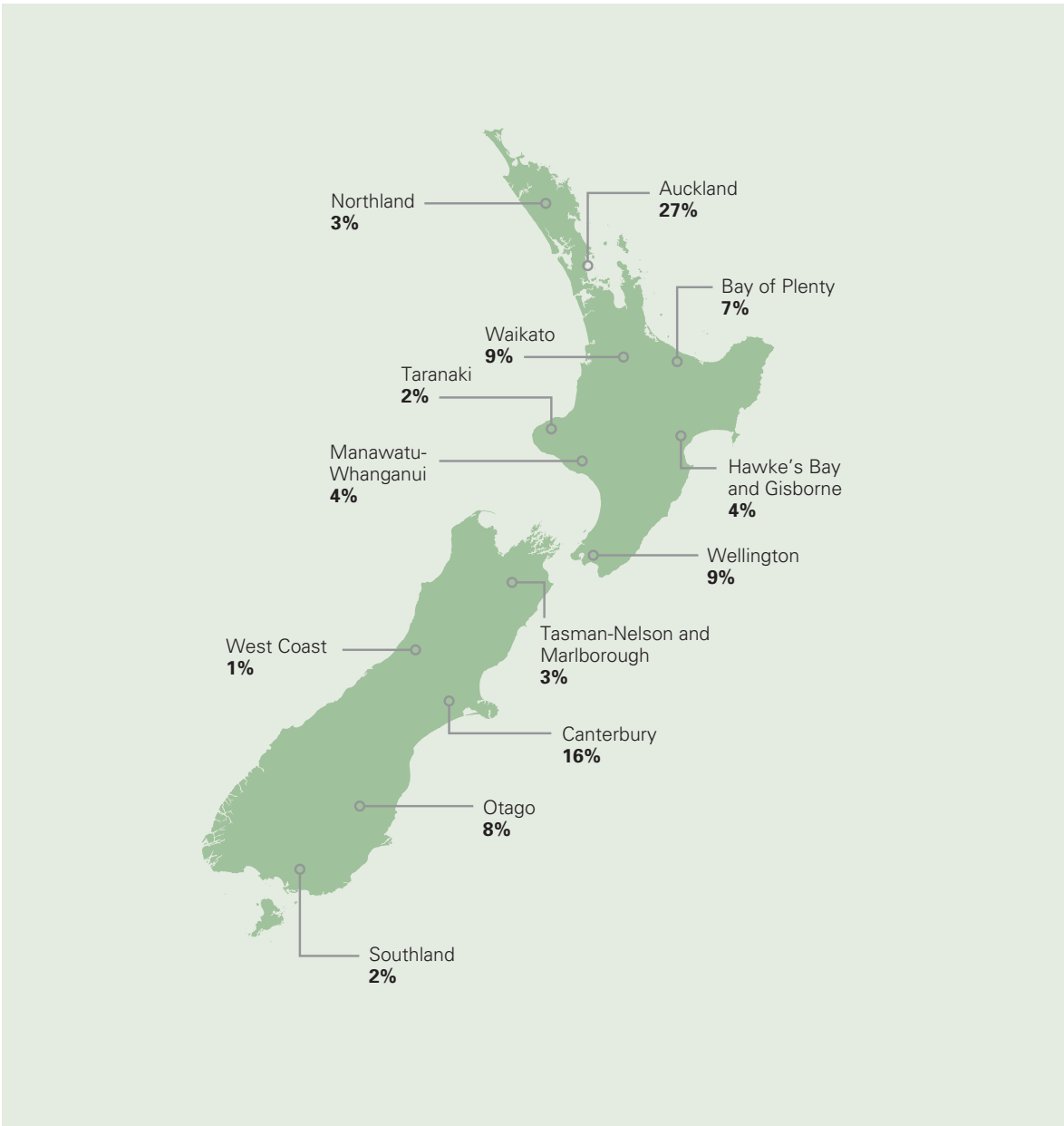
The survey of the occupational therapist workforce showed that 93% of the workforce is female and the remaining 7% male. This backs up the annual statistics from OTBNZ.



3. Region

Just over one-quarter of the occupational therapist workforce lives and works in the Auckland region. The second-largest region for occupational therapists is Canterbury where 15% of the occupational therapist workforce are, followed by Wellington, Otago and Waikato regions each with around 10% of the occupational therapist workforce.

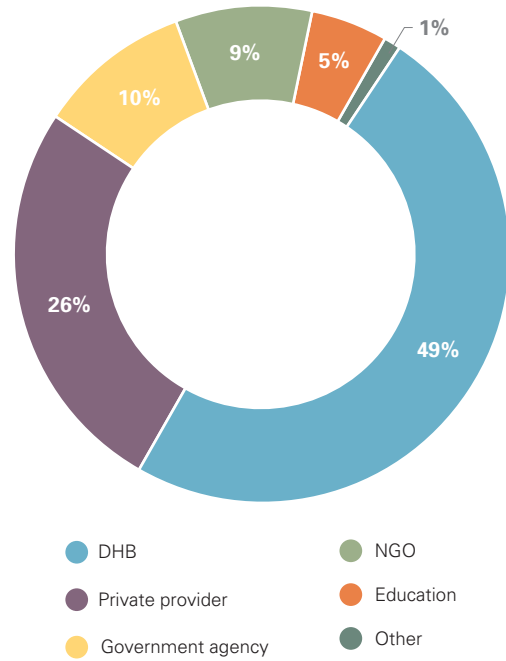
In total, 71% of occupational therapists are in these top five regions. The regions with the smallest share of the occupational therapist workforce are West Coast with 1%, Southland and Taranaki with 2% each and Nelson, Tasman and Marlborough and Northland with 4% each.



*5% not identified in survey

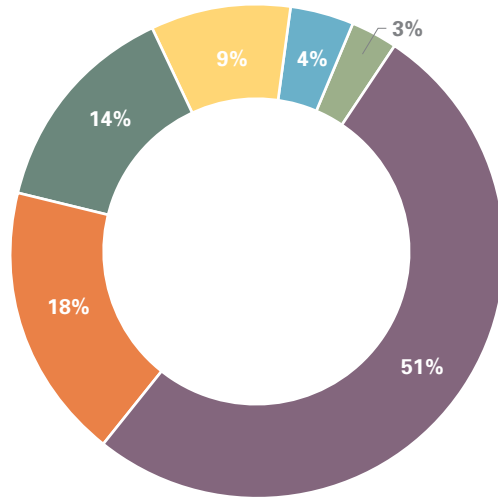
4. What sector do you predominantly work in?

The largest sector for occupational therapist employment is the district health board (DHB) sector with 49% of occupational therapists working for DHBs in public hospitals and community and other settings. The next largest employment sector is private providers with 26% of the occupational therapist workforce, then government agencies including ACC and Corrections with 10% and NGOs with 9%. The remaining 5% are employed by education providers, including AUT and Otago Polytechnic, and other employers.

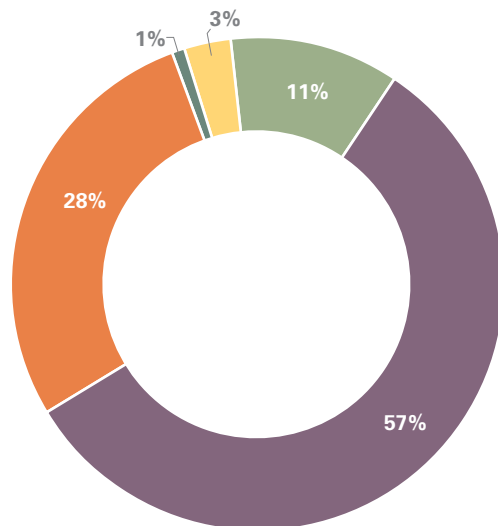


5. What type of occupational therapy work do you predominantly engage in?

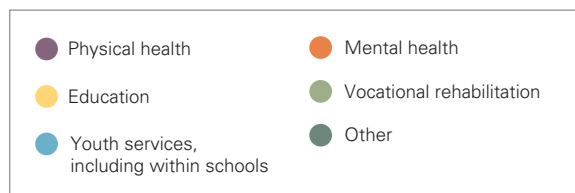
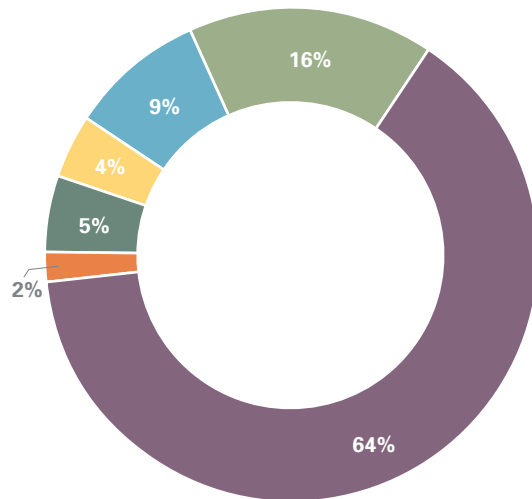
The largest work sector is physical health with 51% of occupational therapists predominantly engaged in this area. The second largest area is mental health with 18%, followed by education, youth services and vocational rehabilitation.



Breaking down the work sector by area of employment yields some interesting results. This graph shows occupational therapists employed in the DHB sector – 57% are engaged in physical health and 28% are engaged in mental health, with the remaining sectors making up 15%.



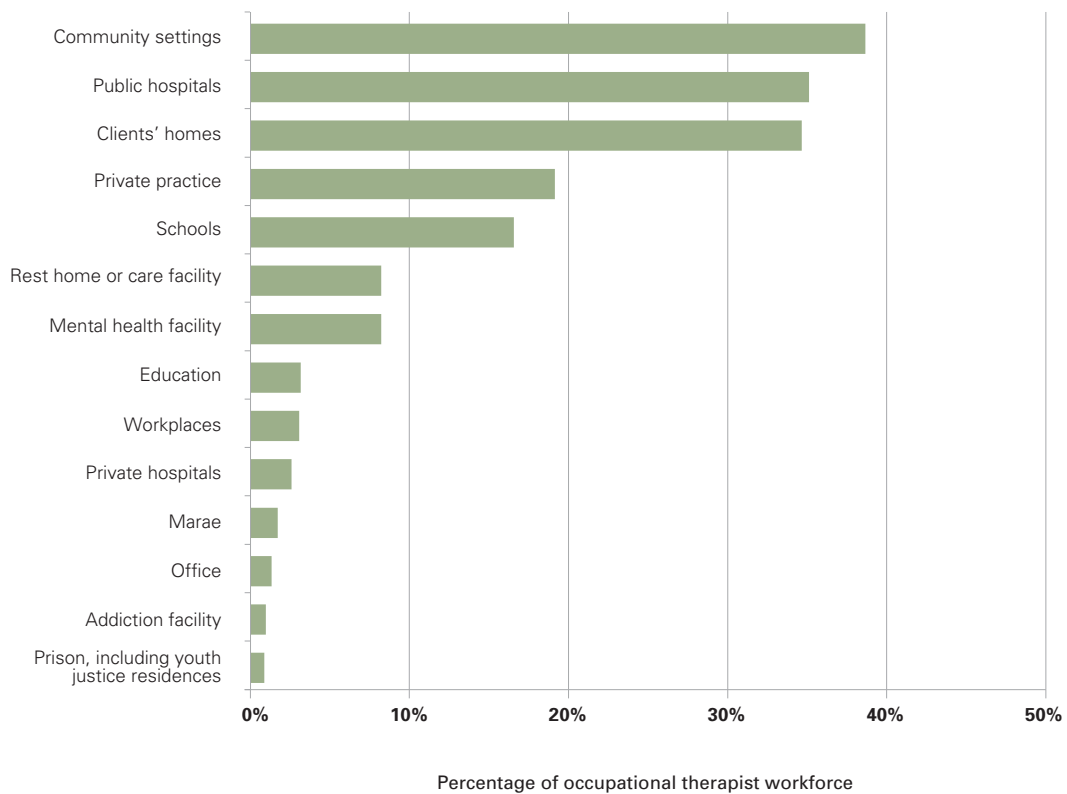
Of the occupational therapists employed by private providers, this graph shows that 64% work in physical health, 2% in mental health, 9% in vocational rehabilitation and a further 24% work in other areas. While these occupational therapists are more likely to predominantly work in physical health compared to DHB occupational therapists, they are also more likely to work in other areas as well. While DHB occupational therapists are heavily engaged in the mental health area, this is an area not heavily engaged with in private practice.



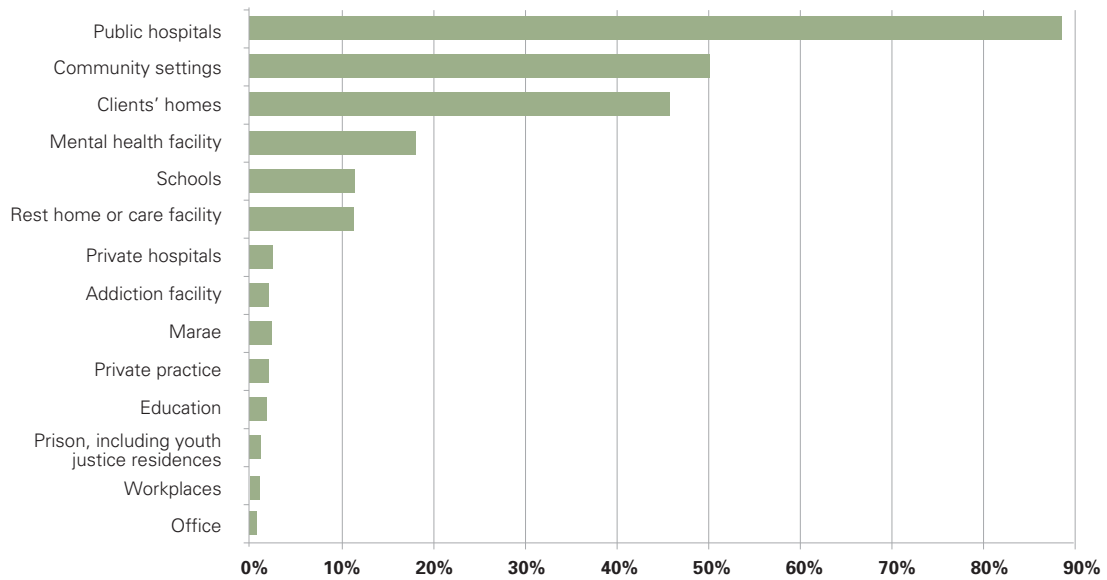
6. Where do you work?

In this question, the occupational therapists were asked to note which of 12 workplaces they worked in during their normal working week and could indicate multiple work locations.

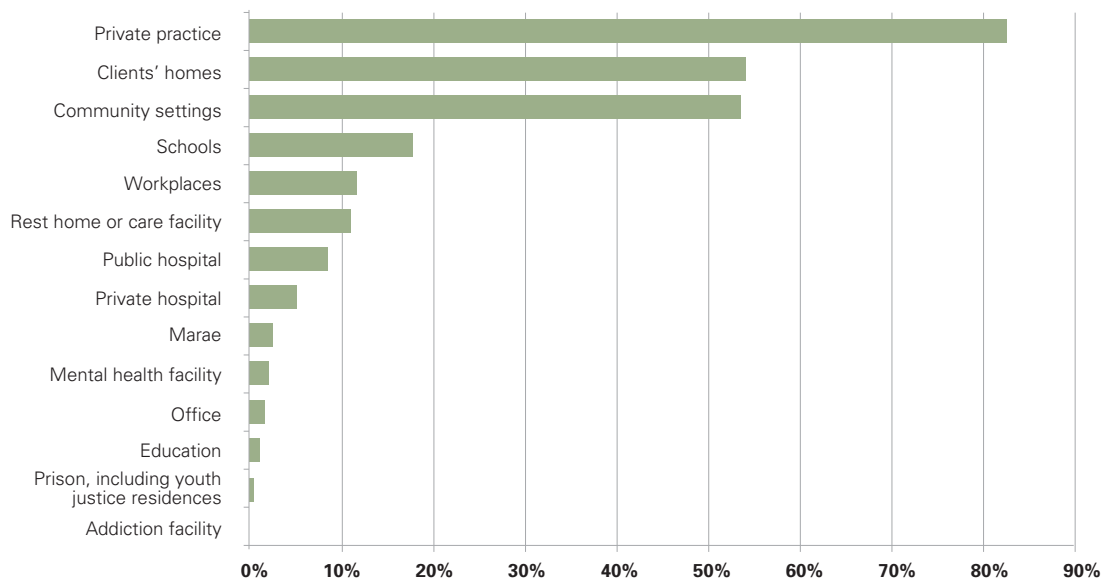
This graph shows that 38% of the occupational therapist workforce worked in community settings, followed by 35% in public hospitals and 34% in clients' homes – the three main locations worked in.



Splitting the overall response by what sector the occupational therapist was employed in revealed some interesting results. As can be seen in this graph, for occupational therapists employed in the DHB sector, the three main work locations were public hospitals at 87%, community settings at 51%, and clients' homes at 44%.



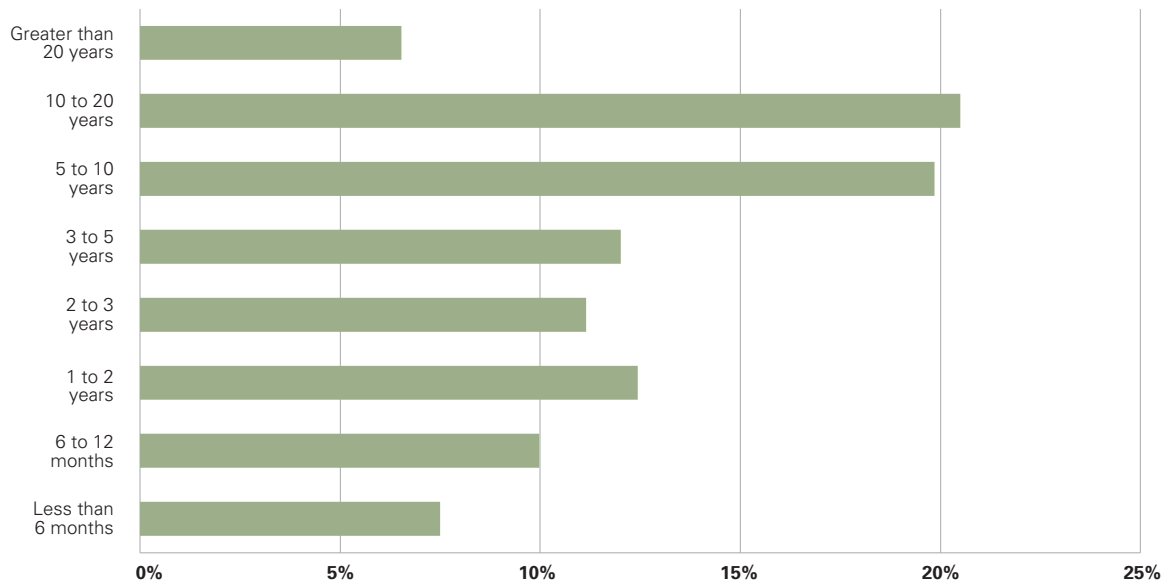
For occupational therapists employed by private providers, the three main work locations were private practice at 82%, clients' homes at 54% and community settings at 54%.



The key difference in the main locations for occupational therapists working for DHBs and for private providers is public hospitals versus private practice, while both sets of occupational therapists work heavily in clients' homes and community settings.

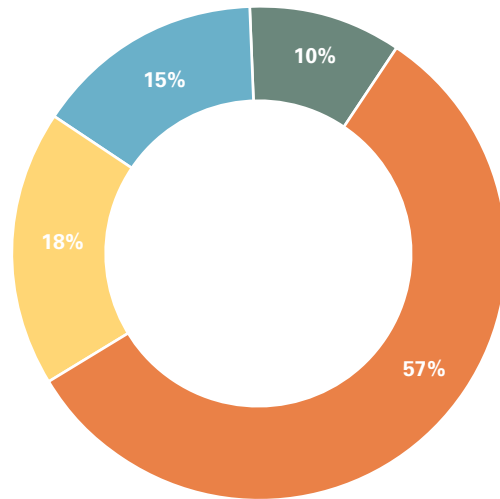
7. How long have you worked for your current employer?

As shown in this graph, 47% of occupational therapists have worked for their current employer for more than 5 years, 36% have worked 1–5 years and 17% have worked for less than a year. This shows that, generally, occupational therapists do not have a high turnover of employment, with almost half of the workforce working for at least 5 years with their current employer. Given that 49% of occupational therapists are employed by DHBs, many of the occupational therapists have a wide scope for changing their job position while remaining with their current employer.

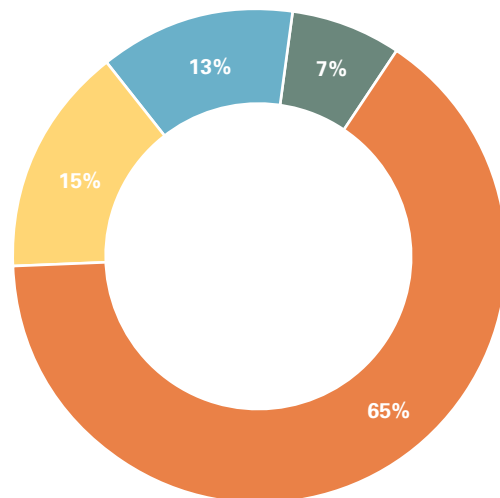


8. How many hours per week do you work?

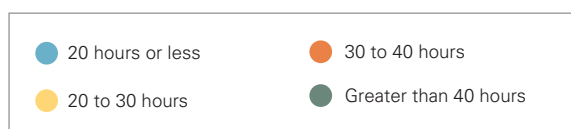
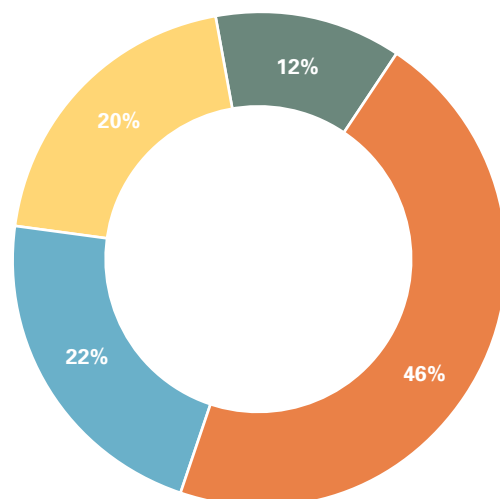
Almost 60% of the occupational therapist workforce work 30–40 hours per week, 18% work 20–30 hours, 15% work less than 20 hours and 10% work more than 40 hours.



This graph shows hours worked by occupational therapists employed in the DHB sector, with 65% working 30–40 hours, 28% working less than 30 hours and 7% working more than 40 hours.

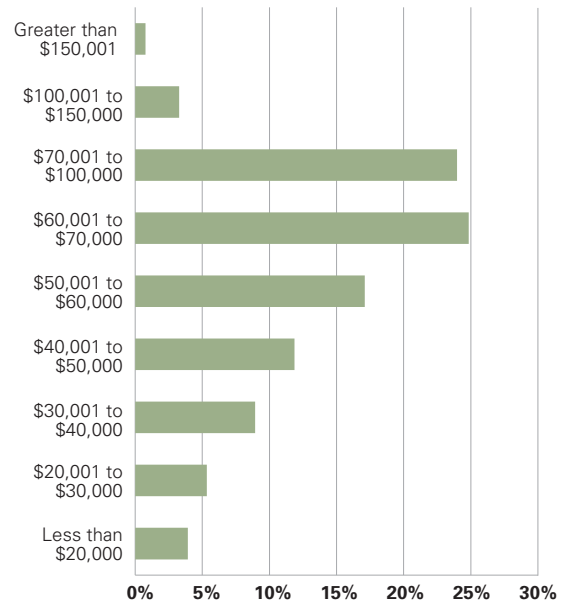


This graph shows that, for occupational therapists working for private providers, 46% work 30–40 hours, 42% work less than 30 hours and 12% work more than 40 hours. This shows that a significant portion of the occupational therapists working for private providers are working part-time compared to large numbers of occupational therapists working full-time in DHBs.



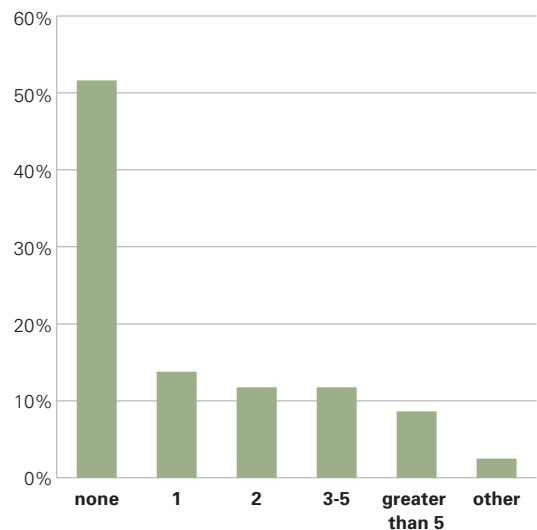
9. What is your annual salary?

The largest income group in the occupational therapist workforce was the \$60,001–70,000 income group with 25% of the occupational therapist workforce earning in this bracket. The second-largest income group was the \$70,001–100,000 income group with 24% of the workforce. Overall, the average income for the occupational therapist workforce was \$60,000.



10. How many staff do you supervise?

Overall, 52% of the occupational therapist workforce supervise no staff, while the remaining 48% supervise one or more staff members – 14% supervise one staff member, 12% supervise two staff members, 12% supervise three to five staff members and 9% supervise more than five staff.



11. Do you work with occupational therapist assistants?

Just 35% of the occupational therapist workforce worked with occupational therapist assistants. Of those working with occupational therapist assistants, 87% worked in the DHB sector and 6% worked in the private sector.

Of the occupational therapist workforce who work with occupational therapist assistants, 73% work in the physical health area followed by 12% working in the mental health area.

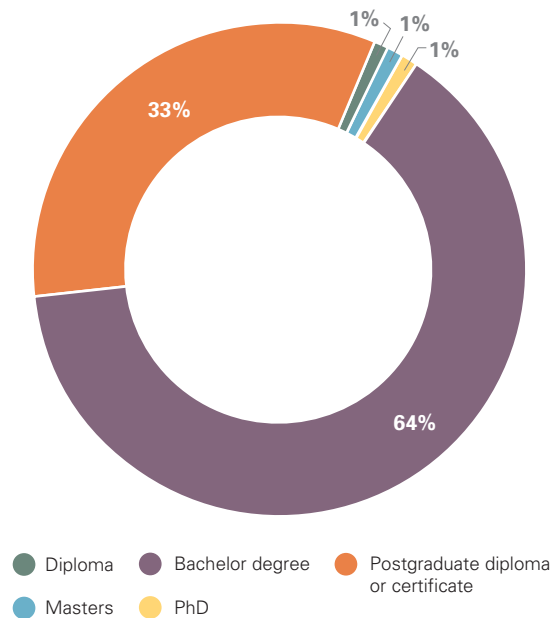
35% ✓

65% ✗

12. What qualifications do you hold?

The predominant qualification held by the occupational therapist workforce is a bachelor’s degree, held by 64% of the occupational therapist workforce. To practise in New Zealand, OTBNZ requires occupational therapists to hold at least a bachelor’s degree in occupational therapy.

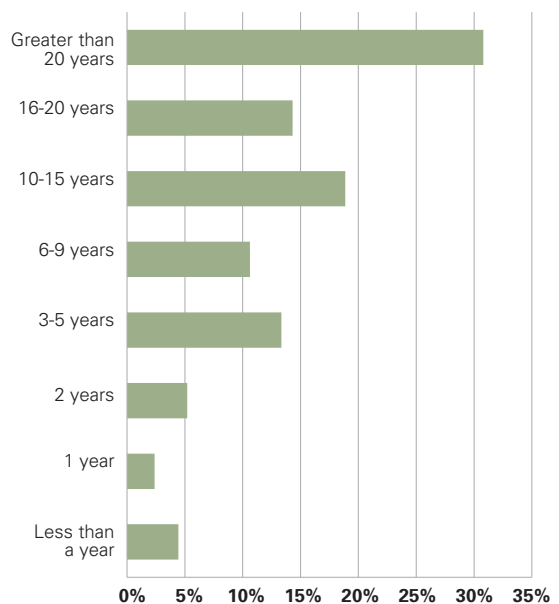
The second most popular qualification held by the occupational therapist workforce is a postgraduate diploma or certificate, with 33% having this qualification. A further 2% of the workforce holds a master’s degree or PhD.



13. How long have you been registered to practise as an occupational therapist in New Zealand?

Just 4% of the occupational therapist workforce have been registered to practise for 1 year or less, 32% have been registered for 1–9 years, 33% have been registered for 10–20 years and 31% have been registered for more than 20 years. Overall, around 45% have been registered for less than 16 years, and the other 55% have been registered for 16 years or more.

It should be noted that an occupational therapist student registering for the first time at around 23–25 years of age could be registered to practise for at least 40 years if they choose to work as an occupational therapist until they are at least 65.



14. Have you ever worked overseas as a New Zealand-registered occupational therapist?

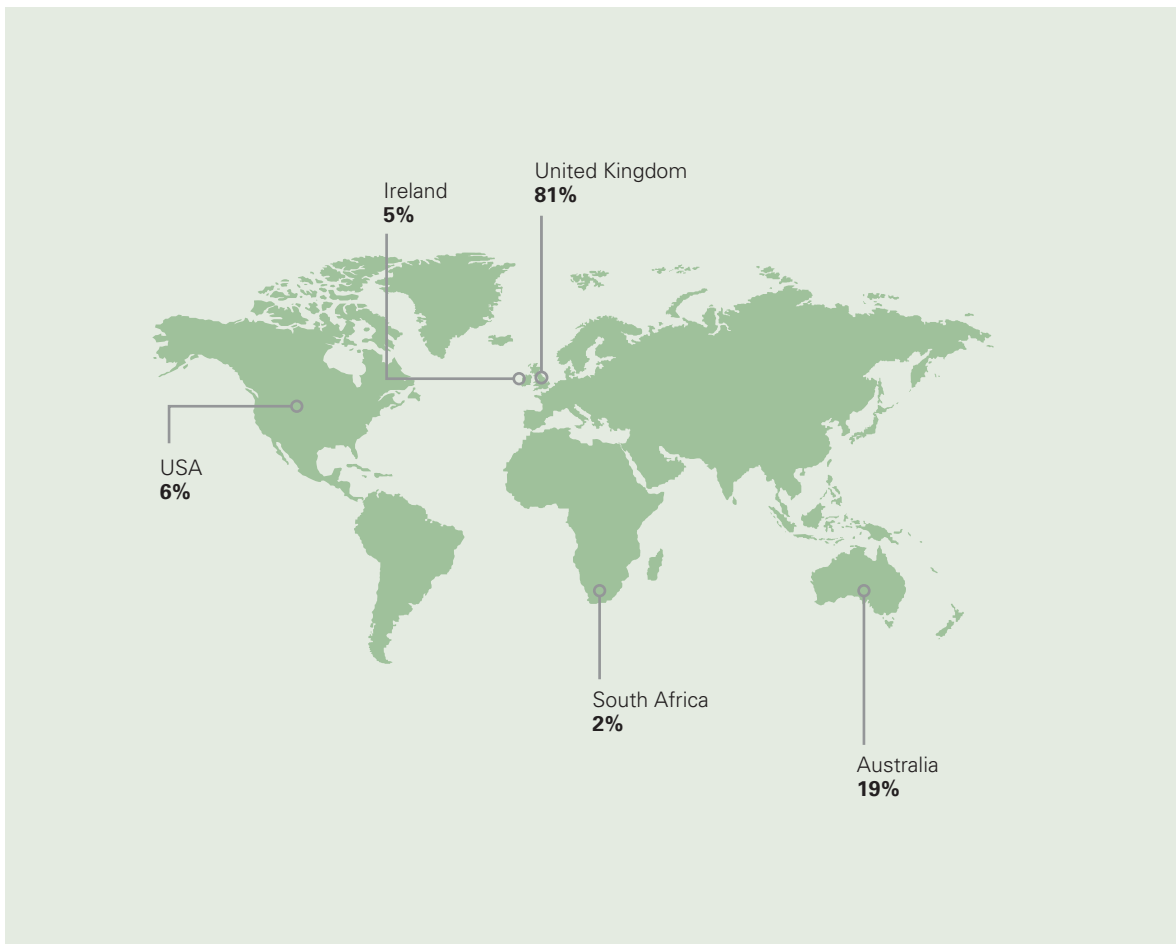
Just over one-third of the occupational therapist workforce have worked overseas.

Of those occupational therapists who have worked overseas, this graph shows where they have worked. Overall, almost 81% of those occupational therapists who have worked overseas have worked in the UK, followed by 19% who worked in Australia. Other destinations for overseas work include the USA, Ireland and South Africa.

It should be noted that it is likely that occupational therapists who worked overseas prior to coming to New Zealand will be included in these numbers.

35% ✓

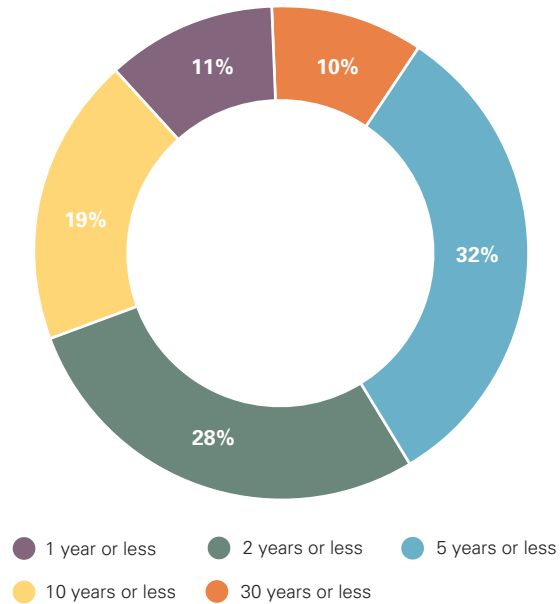
65% ✗



15. For how long did you work overseas?

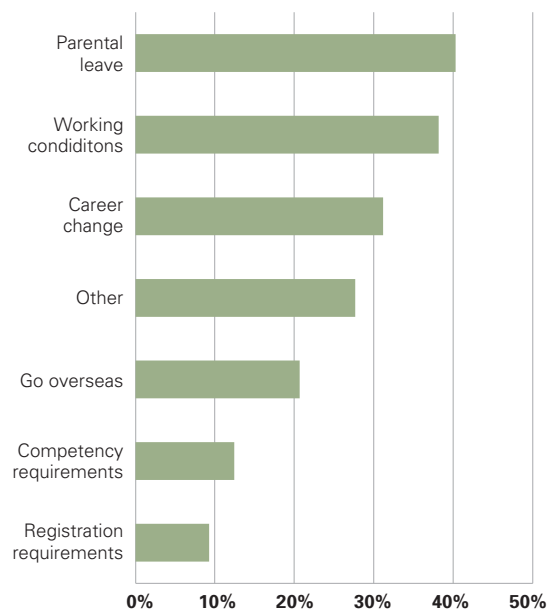
This question was asked of those occupational therapists who indicated that they had worked overseas. Of the 35% of occupational therapists who said they have worked overseas, 32% worked for 2–5 years, while a further 28% worked for 1–2 years. The large number of occupational therapists working overseas for 1–2 years or 2–5 years is unsurprising given the anecdotal evidence of young New Zealanders heading overseas for their overseas experience before heading back to New Zealand to settle down.

Surprisingly 19% had worked overseas for 5–10 years, and a further 10% had worked for 10–25 years overseas.



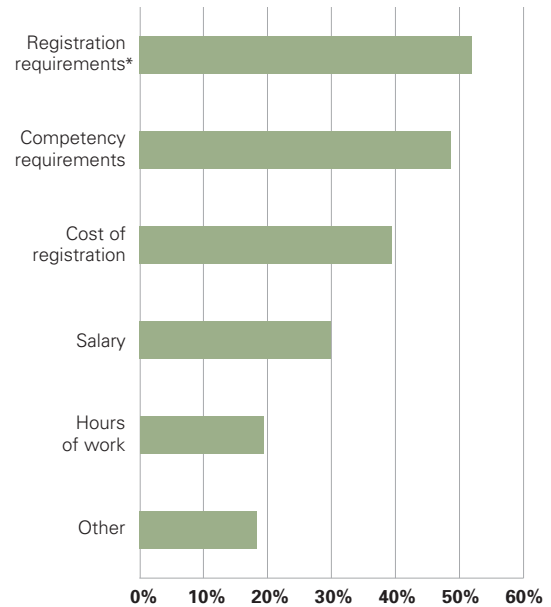
16. What do you think is the most common reason that occupational therapists leave the profession?

The most common reason for occupational therapists to leave the profession according to the registered occupational therapist workforce is parental leave, with 40% selecting this reason. The second most common reason was working conditions noted by 38%, followed by career change noted by 31%.



17. What creates a potential barrier to people re-entering the occupational therapist workforce?

The greatest potential barrier to people re-entering the occupational therapist workforce is registration requirements, noted by 52% of occupational therapists. This was followed by competency requirements, noted by 49% of occupational therapists. Other noted reasons were the financial cost of registration, salary and the hours of work.



*It is not clear whether it is registration or recertification. We will be conducting further research on this issue.

18. Will there be a greater demand for occupational therapists in the future?

Almost 90% of the registered occupational therapist workforce believe that there will be a greater demand for occupational therapists in the future.

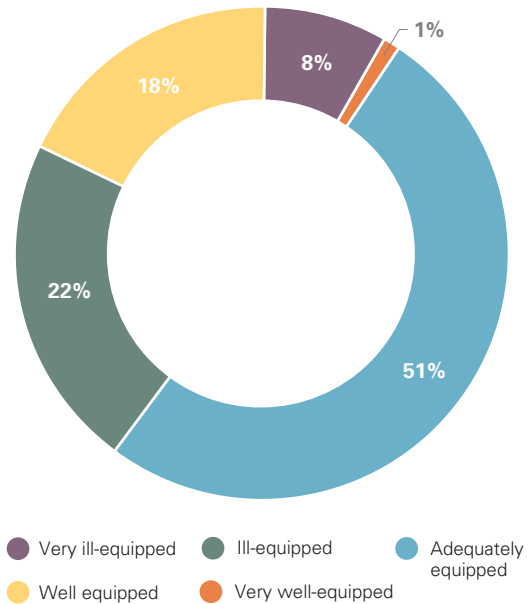
87% ✓

13% ✗

19. On a scale of 1-5, how well equipped are graduate occupational therapists to deal with the demands of the workplace?

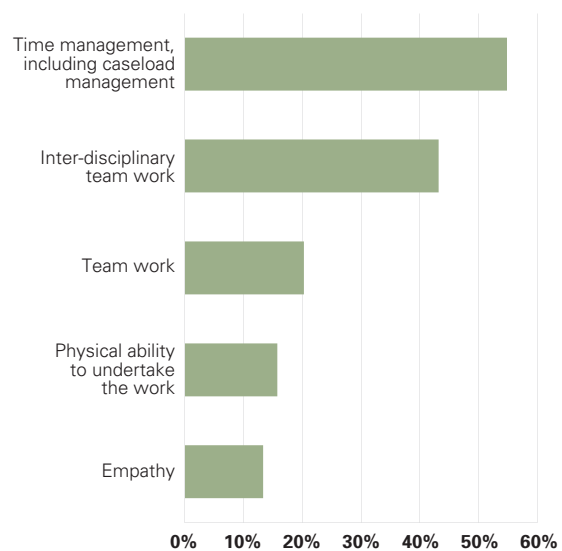
For this question, 1 was very ill-equipped, 2 was ill-equipped, 3 was adequately equipped, 4 was well equipped and 5 was very well equipped.

This graph shows that 51% of the occupational therapist workforce believe that graduate occupational therapists are adequately equipped to deal with the demands of the workplace. A further 19% believe they are either well equipped or very well equipped, while 30% believe they are very ill-equipped or ill-equipped to deal with the demands of the workplace.



20. Where can their competencies be improved?

The occupational therapist workforce were then asked where graduate occupational therapist competencies can be improved. According to the occupational therapist workforce, the main areas are time management, including caseload management, with 55% of the occupational therapist workforce noting this, and 43% noted interdisciplinary team work as an area where graduates' competencies could be improved.

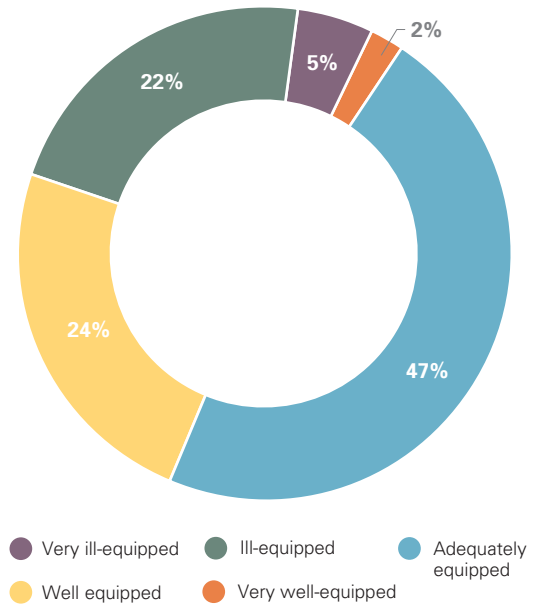


21. On a scale of 1-5, how well equipped are graduate occupational therapists to deal with the demands of the future workplace?

For this question, 1 was very ill-equipped, 2 was ill-equipped, 3 was adequately equipped, 4 was well equipped and 5 was very well equipped.

This graph shows that 47% of the occupational therapist workforce believe that graduate occupational therapists are adequately equipped to deal with the demands of the future workplace. A further 26% believe they are either well equipped or very well equipped, while 27% believe they are very ill-equipped or ill-equipped to deal with the demands of the future workplace.

Overall, the occupational therapist workforce believes that graduate occupational therapists are equipped to deal with the demands of the future workplace compared to the current workplace. From question 19, 70% of occupational therapists thought graduate occupational therapists were adequately equipped or better to deal with the demands of the current workplace, compared to 73% who thought graduate occupational therapists were adequately equipped or better to deal with the demands of the future workplace.



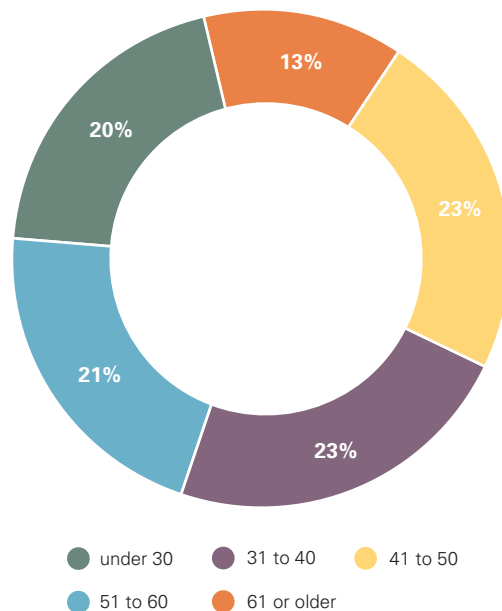
Appendix E Workforce survey results: no practising certificate

In order to supplement the interviews and other research undertaken, BERL surveyed everyone registered with OTBNZ. These tables and graphs show the results of this workforce survey and include the responses from those individuals who do not hold a practising certificate (**non-PC**).

1. Age

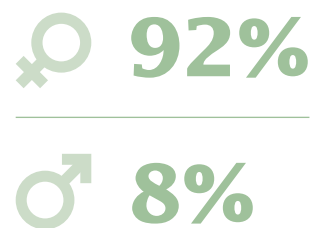
The two largest age groups of **non-PC** are 41–50 and 31–40 with 23% of the workforce in each of these age groups. This is followed by the 51–60 age group with 21% and the under 30 age group with 20%.

Overall 43% of the **non-PC** registered workforce are under 41, and 34% are over 50.



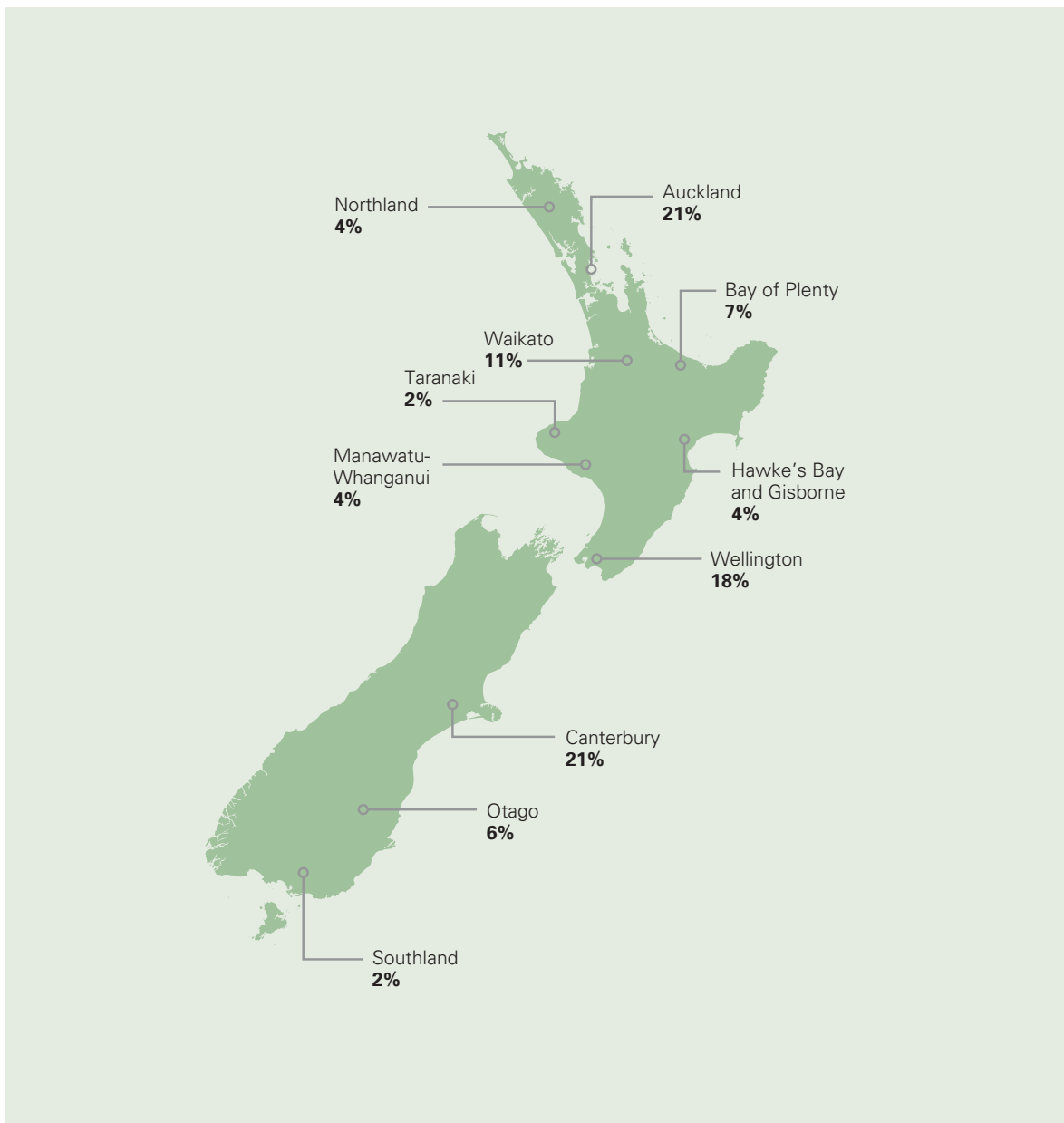
2. Gender

The survey of the **non-PC** registered workforce showed that 92% of the workforce is female and the remaining 8% male.



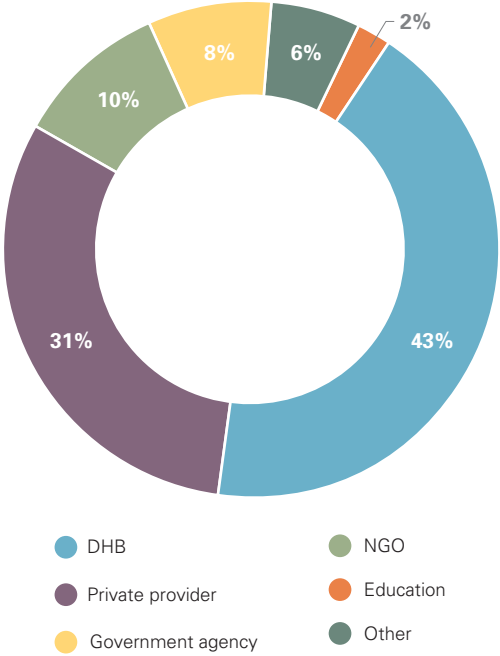
3. Region

Just over one-fifth of the **non-PC** registered workforce lives and works in the Auckland and Canterbury regions. This is followed by the Wellington region with 18% and Waikato region with 11% of the **non-PC** registered workforce. In total, 72% of **non-PC** occupational therapists are in these top four regions. The regions with the smallest share of the **non-PC** registered workforce are West Coast and Nelson, Tasman and Marlborough with none.



4. What sector do you predominantly work in?

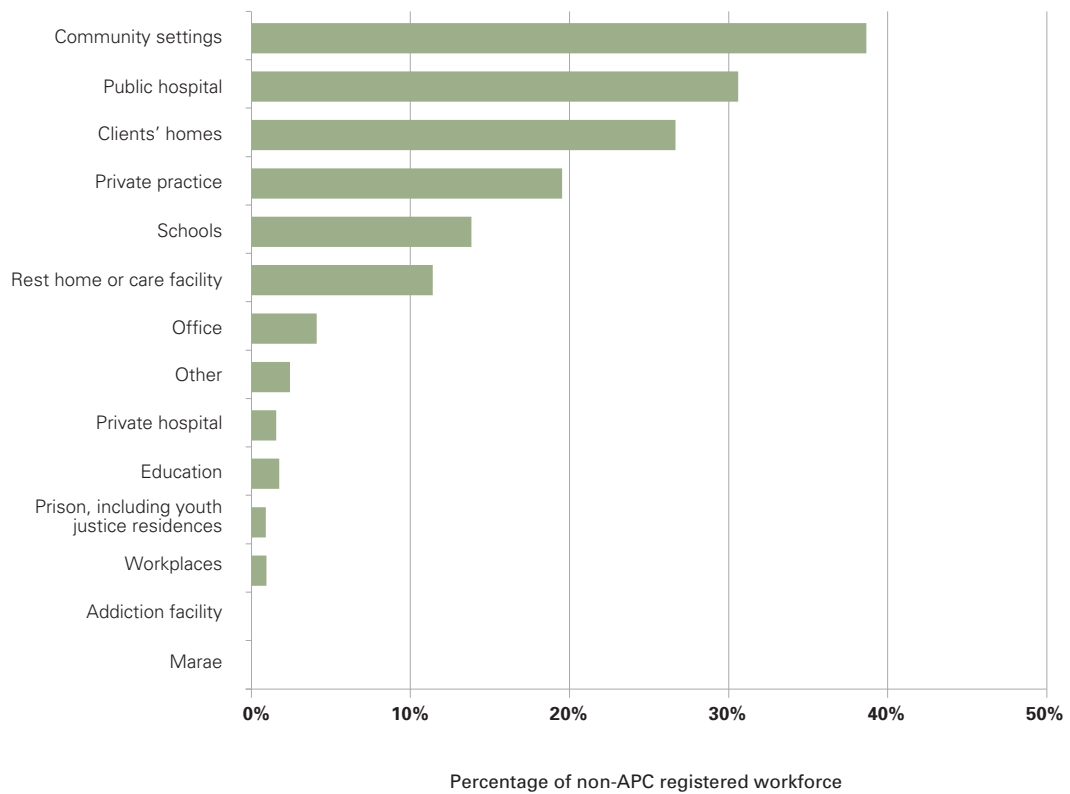
The largest sector for **non-PC** registered employment is the district health board (DHB) sector with 43% of the **non-PC** registered workforce working for DHBs in public hospitals and community and other settings. The next largest employment sector is private providers with 31% of the **non-PC** registered workforce, then government agencies including ACC and the Corrections Department with 8% and NGOs with 10%. The remaining 8% are employed by education providers, including AUT and Otago Polytechnic, and other employers.



5. Where do you work?

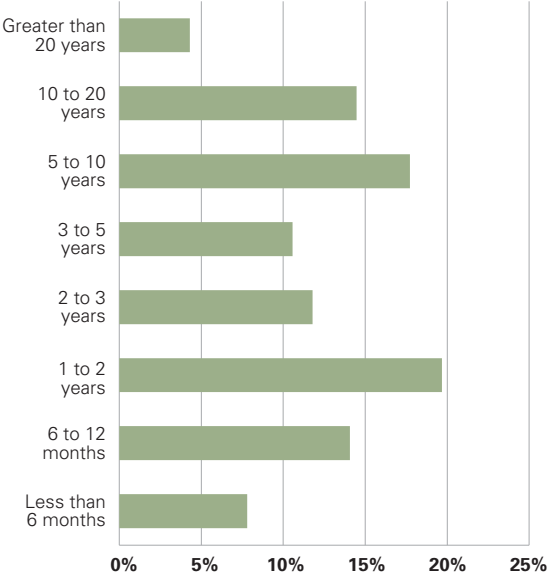
In this question, the **non-PC** registered workforce were asked to note which of 12 workplaces they worked in during their normal working week and could indicate multiple work locations.

This graph shows that 38% of the **non-PC** registered workforce worked in community settings, followed by 30% in public hospitals and 26% in clients' homes – the three main locations worked in.



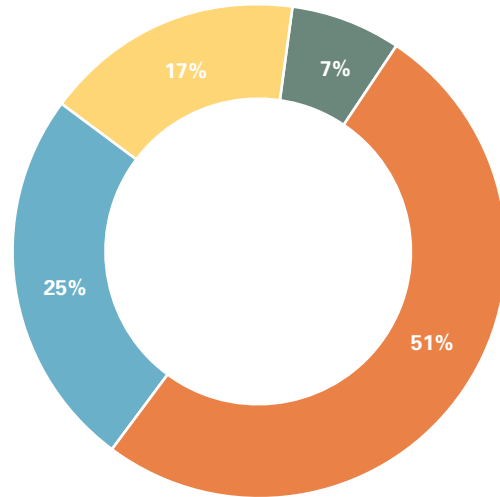
6. How long have you worked for your current employer?

As shown in this graph, 35% of the **non-PC** registered workforce have worked for their current employer for more than 5 years, 42% have worked 1–5 years and 23% have worked for less than a year.

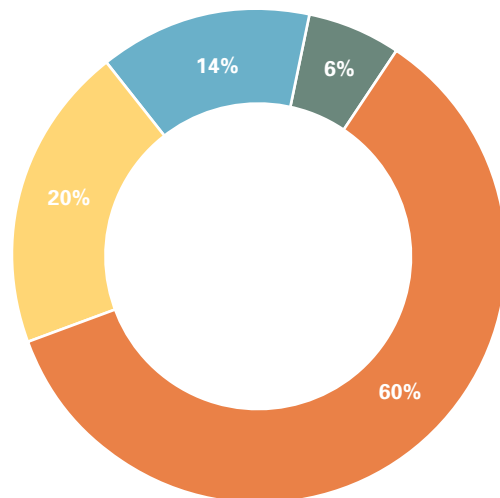


7. How many hours per week do you work?

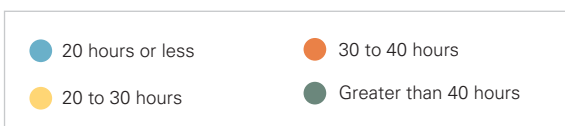
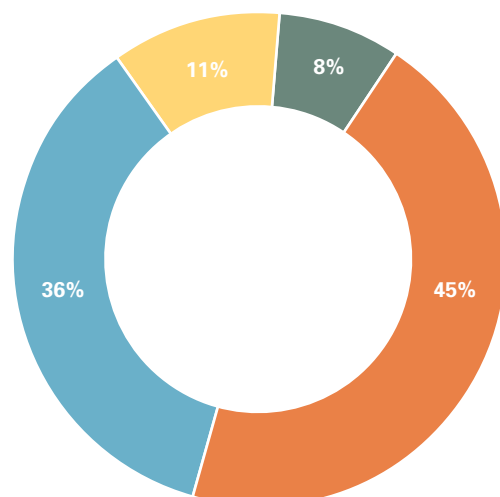
Just over 51% of the **non-PC** registered workforce work 30–40 hours per week, 17% work 20–30 hours, 25% work less than 20 hours and 7% work more than 40 hours a week.



This graph shows hours worked by the **non-PC** registered workforce employed in the DHB sector, with 60% working 30–40 hours, 34% working less than 30 hours and 6% working more than 40 hours.

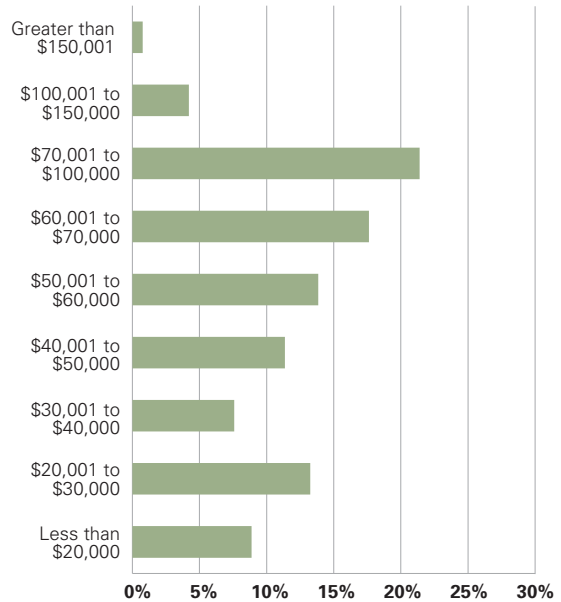


This graph shows that, for the **non-PC** registered workforce working for private employers, 45% work 30–40 hours, 47% work less than 30 hours and 8% work more than 40 hours. This shows that a significant portion of the **non-PC** registered workforce working for private employers are working part-time compared to large numbers of **non-PC** registered workforce working full-time in DHBs.



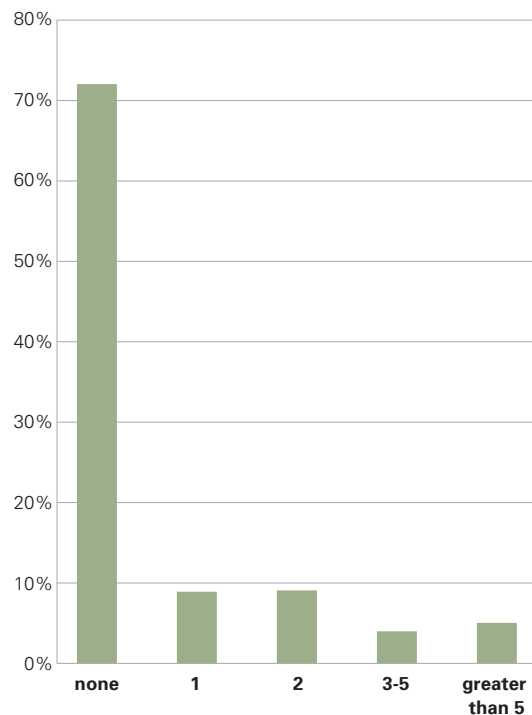
8. What is your annual salary?

The largest income group in the **non-PC** registered workforce was the \$70,001–100,000 income group with 21% of the **non-PC** registered workforce earning in this bracket. The second-largest income group was the \$60,001–70,000 income group with 18% of the workforce. Overall, the average income for the **non-PC** registered workforce was \$50,000.



9. How many staff do you supervise?

Overall, 73% of the **non-PC** registered workforce supervise no staff, while the remaining 27% supervise one or more staff members – 9% supervise one staff member, 9% supervise two staff members, 4% supervise three to five staff members and 5% supervise more than five staff.



10. Have you ever worked overseas as a New Zealand-registered occupational therapist?

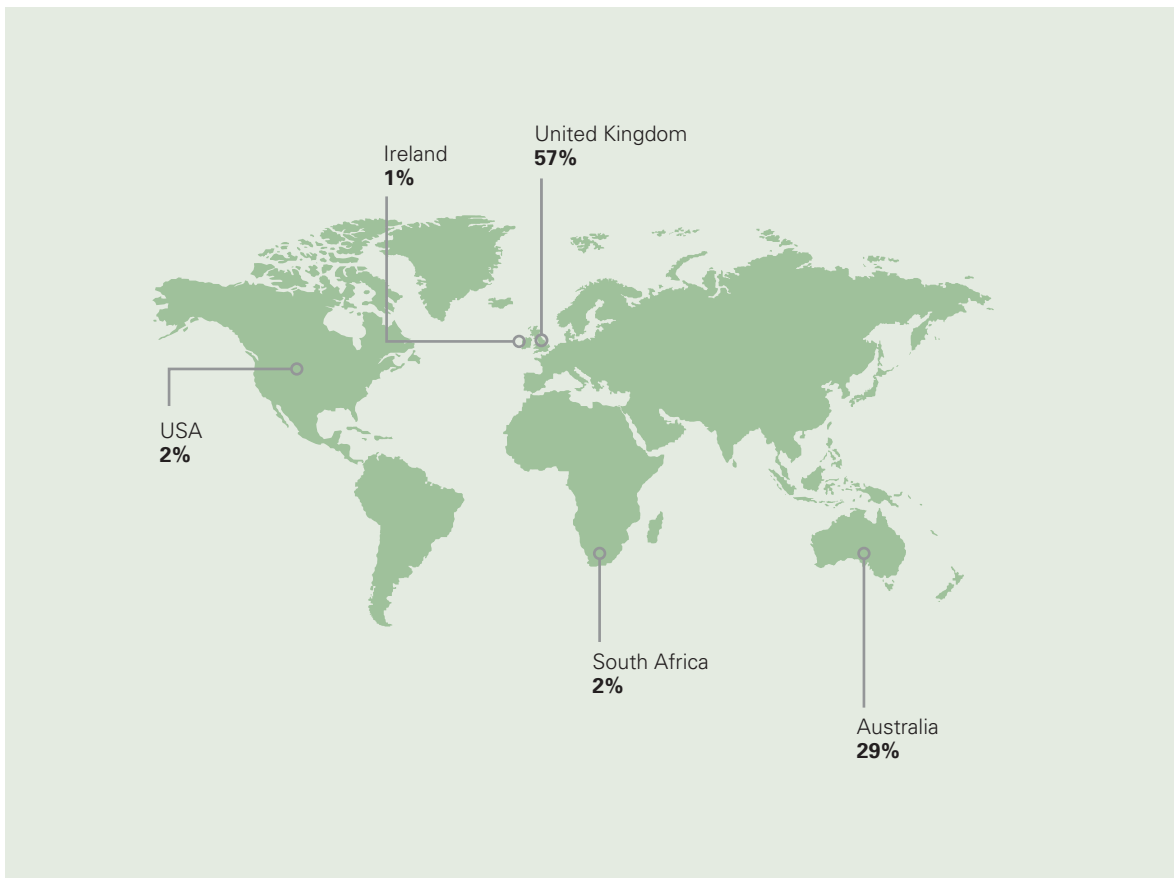
Just under 50% of the **non-PC** registered workforce have worked overseas. This is not surprising as one reason for an occupational therapist to be registered but not holding a practising certificate is that they are currently working overseas.

Of those in the **non-PC** registered workforce who have worked overseas, this graph shows where they have worked. Overall, almost 60% of those in the **non-PC** registered workforce who have worked overseas have worked in the UK, followed by 29% who worked in Australia. Other destinations for overseas work include the USA, Ireland and South Africa.

It should be noted that it is likely that those in the **non-PC** registered workforce who worked overseas prior to coming to New Zealand will be included in these numbers.

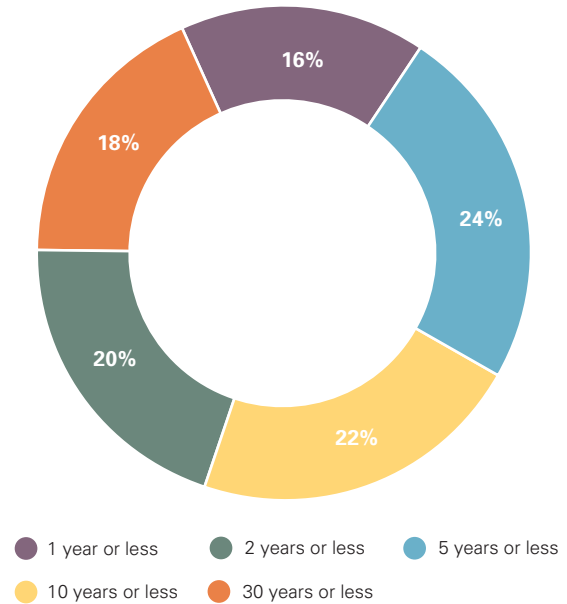
46% ✓

54% ✗



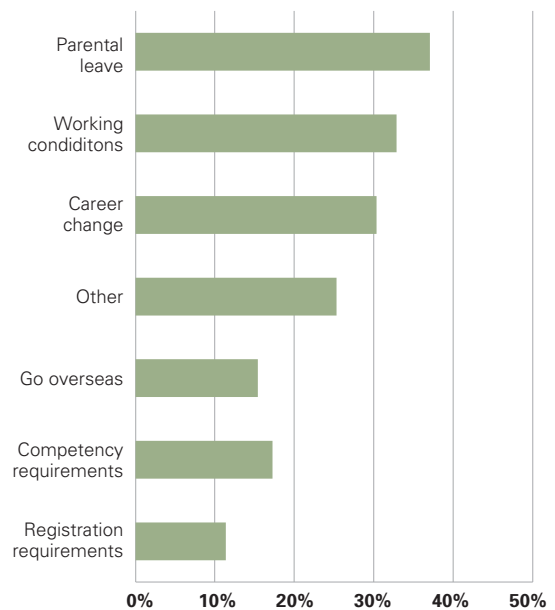
11. For how long did you work overseas?

This question was asked of those in the **non-PC** registered workforce who indicated that they had worked overseas. Of the 46% of the **non-PC** registered workforce who said they have worked overseas, 24% worked for 5–10 years, while a further 22% worked for 10–30 years and 20% worked for 2–5 years.



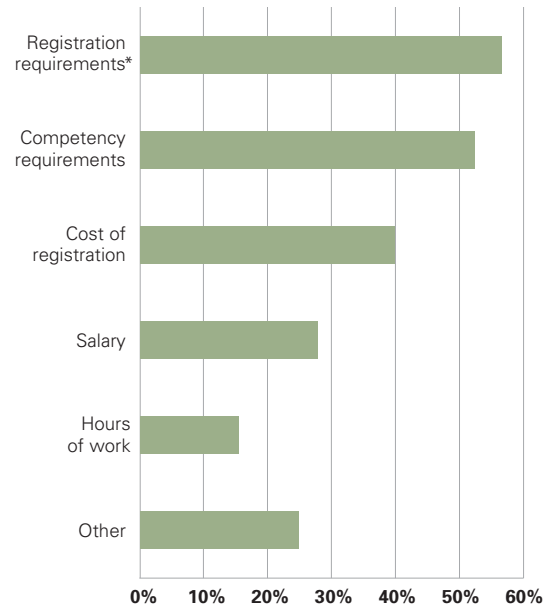
12. What do you think is the most common reason that occupational therapists leave the profession?

The most common reason for occupational therapists to leave the profession according to the **non-PC** registered workforce is parental leave, with 37% selecting this reason. The second most common reason was working conditions noted by 32%, followed by career change noted by 30%.



13. What creates a potential barrier to people re-entering the occupational therapist workforce?

The greatest potential barrier to people re-entering the occupational therapist workforce is registration requirements, noted by 56% of the **non-PC** registered workforce. This was followed by competency requirements, noted by 53% of the **non-PC** registered workforce. Other noted reasons were the financial cost of registration, salary and the hours of work.



*It is not clear whether it is registration or recertification. We will be conducting further research on this issue.

14. Will there be a greater demand for occupational therapists in the future?

Almost 85% of the **non-PC** registered workforce believes that there will be a greater demand for occupational therapists in the future.

84% ✓

16% ✗

Appendix F Private employers survey

For this survey, identified private employers of occupational therapists were asked a number of questions about their occupational therapist workforce.

1. What speciality area(s) do your occupational therapists work in?

Private employers were provided with 19 different speciality areas. This table shows the percentage of private employers who had occupational therapists working in each speciality area, with at least 20% of the private employers responding in this area. Of the 19 areas, the six not listed in the table had either zero or one response.

On average, each private employer had occupational therapists working in four different areas, with some employers focusing on just one area and some covering up to 12 different speciality areas.

SPECIALTY AREAS	%
Children and adolescents	50
Brain and stroke rehabilitation	40
Injury rehabilitation	40
Work assessment	30
Aids for living and driving for the disabled	30
Paediatric	30
Work injury / health and safety	20
Physical disability	20
Trauma rehabilitation	20
Injury prevention in the workplace	20
Injury prevention in the home	20
Equipment for mobility	20
Equipment for modifications	20

2. Where do your occupational therapists predominantly work?

Private employers were able to select from 12 different main areas of work. Of these areas, over half of the private employers indicated their occupational therapists work in community setting and in clients' homes.

From the private employers' responses, it can be clearly seen that the occupational therapists employed work with clients in the clients' environment rather than treating clients at the private employers' premises.

MAIN AREAS WHERE OCCUPATIONAL THERAPISTS WORK	%
Community settings	70
Clients' homes	60
Schools	30
Clients' workplaces	30
Rest home or care facility	20

3. How many occupational therapists do you employ?

For this question, the private employers were asked how many occupational therapists they employ by four different employment statuses – full-time, part-time, casual and on contract.

This table shows the average number of occupational therapists employed across the private employers. Overall, on average of 11.6 occupational therapists were employed per private employer. The largest number of occupational therapists are employed on contract, with an average of nine occupational therapists being employed this way per private employer. This is followed by full-time employees with an average of 2.1 employed per employer.

Overall, 60% of private employers employed full-time employees, 40% employed contractors, 20% employed part-time employees and just 10% employed casual occupational therapists. Just 30% of private employers employed more than 10 occupational therapists, and just 10% employed more than 50 occupational therapists.

AVERAGE NUMBER OF OCCUPATIONAL THERAPISTS EMPLOYED	
Full-time	2.1
Part-time	0.4
Casual	0.1
On contract	9.0
Overall average	11.6

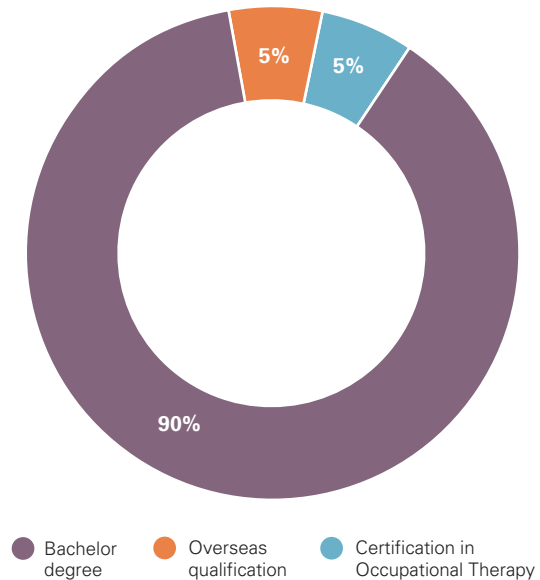
4. How do you find new occupational therapists?

For this question, private employers were asked the various ways in which they went about finding a new occupational therapist. As shown in this table, 80% of private employers used online advertising, followed by 70% using word of mouth. These two methods were used exclusively by 50% of private employers, with the remaining 50% using at least one other method of recruitment.

HOW EMPLOYERS FIND NEW OCCUPATIONAL THERAPISTS	%
Advertise online	80
Worth of mouth	70
Social media	30
Occupational therapy schools	20
Advertise in newspapers or magazines	20

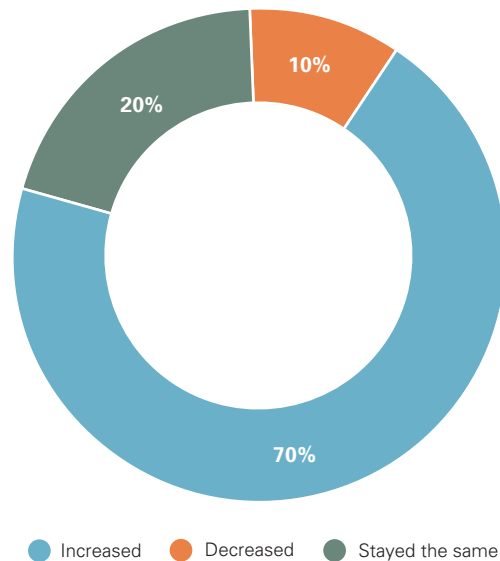
5. What qualifications do your occupational therapists predominantly hold?

This graph shows that 90% of private employers employed occupational therapists who held predominantly a bachelor’s degree in occupational therapy.



6. Has the number of occupational therapists you employ increased or decreased over the last 5 years?

As shown in this graph, 70% of private employers reported that the number of occupational therapists they employ has increased over the last 5 years. At the same time, 10% reported a decline in occupational therapist numbers, and the remaining 20% have seen their occupational therapist numbers stay the same across the last 5 years.



7. What impacts on the turnover of your occupational therapists?

As shown in this table, 50% of private employers noted that parental leave is impacting on the turnover of their occupational therapists, and 20% also noted that occupational therapists leaving to change their employer or heading overseas impacted on their turnover of occupational therapists.

IMPACTS ON THE TURNOVER OF OCCUPATIONAL THERAPISTS	%
Parental leave	50
Change employer	20
Go overseas	20

8. Do you employ occupational therapy graduates?

Of the private employers surveyed, just 30% employed occupational therapist graduates in their business.

30% ✓

70% ✗

9. Do you have a graduate programme to support your occupational therapist graduates?

This was a follow-up question limited to those private employers who did employ graduates. Of the 30% of private employers who did employ occupational therapist graduates, only 33% had a graduate programme in place to support their occupational therapist graduates. This does not mean that the other 67% of private employers did not have any support in place for their graduates, just that they had no formal programme of support.

33% ✓

67% ✗

10. What other allied health professionals do you employ?

Interviews and research undertaken prior to the survey of private employers being sent out made us aware that private employers of occupational therapists are also highly likely to employ other allied health professionals, so this question was added to the survey.

This table shows that 50% of private employers also employed a physiotherapist, while 40% employed a registered nurse or other allied health professional. In addition, 50% of private employers did not employ any other allied health professionals.

OTHER ALLIED HEALTH PROFESSIONALS EMPLOYED	%
Physiotherapist	5
Registered Nurse	20
Other	40
Speech Language Therapist	30
Osetopath	10
Chiropractor	40

11. Will occupational therapists become more or less specialised?

This question was an open-response question for private employers. It was included to get their thoughts on what is happening to the occupational therapist workforce at present. As shown in this graph, 60% of private employers thought that occupational therapists were becoming more specialised, while the remaining 40% did not wish to answer or were uncertain whether occupational therapists were becoming more or less specialised.

60% 

40% 

12. Is education and training keeping up with these changes?

This was a follow-up question to the previous question about whether occupational therapists were becoming more or less specialised. The response from private employers was that 37% thought that the education and training was keeping up with the changes, and 63% thought it was not keeping up with the changes. Private employers who thought occupational therapists were becoming more specialised were split equally into those that thought education and training was keeping up with the changes and those that did not.

37% 

63% 

13. Will more occupational therapists work part-time or job share in the future?

This was an open-response question around whether occupational therapists in the future will work more part-time or job share. Analysing the responses and categorising them found that 50% of private employers thought that occupational therapists in the future would work more part-time or job share their positions, a view that was often based on the current workforce demographics holding into the future. Of the remaining 50% of private employers, 20% thought that they would not see an increase in part-time or job share, and the remaining 30% did not know which way it would go.

50% 

20% 

30% 



Published by the:
Occupational Therapy Board of New Zealand
www.otboard.org.nz

AUGUST 2018

Occupational Therapy Board of New Zealand

22-28 Willeston Street,
Wellington 6011, New Zealand

PO Box 9644, Marion Square,
Wellington 6141, New Zealand



0800 99 77 55 | +64 4 918 4740



enquiries@otboard.org.nz



otboard.org.nz



OTBNZ