UNDERVALUED AND OVERSTRETCHED

Inequity, Discrimination, and the Crisis Facing Alberta's Allied Health-Care Workforce

Jenny Godley (lead author), with co-authors
Farnaz Dastras and Lori Jane Pasaraba

PARKLAND INSTITUTE

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MENTAL HEALTH THERAPISTS
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MRI TECHNOLOGISTS
PARAMEDICS
ADDICTIONS COUNSELLORS

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Parkland Institute
4-50 Arts and Convocation Hall
University of Alberta
Edmonton, AB T6G 2E6

Phone: 780.492.8558
Email: parkland@ualberta.ca
ParklandInstitute.ca.

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ABOUT THE AUTHORS

Dr. **Jenny Godley**, PhD, is a professor in the department of anthropology and archaeology and an adjunct professor in the department of community health sciences at the University of Calgary. With extensive training in demography and social network analysis, Dr. Godley has conducted quantitative research on the social determinants of health for over 20 years. Her work explores the mechanisms through which intersecting axes of social inequality affect health. Dr. Godley is currently leading the implementation of innovative transdisciplinary graduate programs at the University of Calgary as the inaugural associate dean, transdisciplinary scholarship in the faculty of graduate studies.

Farnaz Dastras is a PhD student in sociology at the University of Calgary, focusing on mental health and quantitative research methods. She currently serves as a teaching and research assistant in the department of sociology and works as a statistical assistant at Statistics Canada. She is also affiliated with Alberta Health Services as a graduate research assistant. Her work focuses on the social determinants of mental health and health inequities.

Lori Jane Pasaraba is a social science researcher with over a decade of experience conducting quantitative, qualitative, and mixed-methods research in the Philippines, Singapore, and Canada. She holds an MA in Sociology and has worked on projects exploring immigration, mental health, social networks and health outcomes, and experiences of racism and their impact on well-being and support-seeking attitudes, including work with Statistics Canada survey and administrative datasets. She currently works at a community-based research firm consulting on evaluation, community engagement, and data audits, where she has led mixed-methods projects on grassroots empowerment, vehicle-for-hire needs, and settlement service evaluations.

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EXECUTIVE SUMMARY

Allied health-care workers — professionals who work in collaboration with doctors and nurses, such as lab technologists, counsellors, and paramedics — make up approximately one-third to one-half the health-care workforce in Alberta. They enable the delivery of health care throughout the system — in the community, in tertiary care centres, and in acute care centres. Allied health-care workers are currently navigating the uncertainties of the redesign of Alberta Health Services. We conducted a study to examine pay inequities, experiences of workplace discrimination, job-related stress, and retention within the allied health-care workforce. We also asked the workers to reflect on the proposed AHS changes. We summarize our findings below.

Pay Inequities

We found pay inequities within the allied health-care workforce due to gender, disability status, and visible minority status. Once we account for age, education, and length of time in the profession, women make less than men, people with disabilities make less than those without disabilities, and visible minorities make less than non-visible minorities.

Everyday Discrimination

Allied health-care workers in Alberta report experiencing very high rates of discrimination at work, including being treated with less courtesy or respect than other people, being treated as though they are not as smart as other people, and being threatened or harassed. Over 80% of allied health-care workers report experiencing discrimination at work at least a few times a year, with 52% reporting monthly, 32% reporting weekly, and 15% reporting daily experiences of discrimination on the job. Professions that report the highest frequency of discrimination include paramedics, administrative support staff, lab assistants, pharmacy technicians, and medical radiation technicians. Remarkably, 13% of respondents say that discrimination is 'just part of the job.'

Employment Discrimination

Employment discrimination (experiences of being unfairly not hired, not promoted, or fired) is reported by 40% of respondents. Individuals with higher levels of education report less employment discrimination, but older individuals and those who identify as having a disability report higher levels. Professions that report the highest levels of employment discrimination include addictions counsellors, administrative support workers, advanced care paramedics, and lab assistants.

Stress

Allied health-care workers report extremely high levels of job-related stress. Over 70% state that their job is very stressful, 75% state that their job is emotionally draining, and 45% state that they are overwhelmed by the demands of their job. Those who identify as having a disability report higher levels of job stress on all measures. The professions that score the highest when asked if their job is stressful and if their job is emotionally draining are acute care paramedics, family counsellors, primary care paramedics, mental health therapists, addictions counsellors, social workers, and pharmacy technicians.

Retention

Over 35% of allied health-care workers report that they often think about quitting their jobs. Those with higher levels of education are less likely to think about quitting. Those who identify as having a disability are both more likely to often think about quitting and more likely to be looking for a job outside the organization within the next year, controlling for other demographic variables. Pharmacy technicians, paramedics, administrative support workers, lab assistants, lab technologists, family counsellors, and addictions counsellors all report high levels of thinking about quitting, and a high likelihood of looking for a job outside the organization in the next year.

The opinions of allied health-care workers about the proposed changes to the provincial health-care system are overwhelmingly negative.

Proposed Changes to the Provincial Health-Care System

The opinions of allied health-care workers about the proposed changes to the provincial health-care system are overwhelmingly negative. Health-care workers are worried about the lack of involvement of front-line workers in planning and implementing the changes, which they believe will lead to increased complexity and fragmentation of services.

Recommendations

Section 10 of this report provides a set of recommendations (overall and occupation-specific) that aim to improve pay equity, reduce discrimination, alleviate job-related stress, and ensure meaningful worker participation in health-care system reforms in Alberta. Included are the following recommendations:

1. Conduct further studies to document pay inequities (carried out by unions, professional organizations, or academic partners), and make pay adjustments as necessary.
2. Implement standardized and transparent pay scales throughout the health-care system.
3. Implement robust anti-discrimination policies with clear reporting guidelines and clear consequences for violations.
4. Introduce training on workplace rights and unconscious bias, particularly around ableism.

5. Reduce workload burden by increasing staffing levels and improving resource allocation.
6. Prioritize mental health support and wellness initiatives for all health-care workers.
7. Establish a formal provincial advisory council composed of allied health-care workers to provide input to Alberta Health and Alberta Health Services on policy changes.
8. Create internal task forces within each of the new agencies responsible for acute care, primary care, continuing care and assisted living, and mental health and addictions care to assess the impact of health-care system changes on employees and develop mitigation strategies.

1. INTRODUCTION AND OVERVIEW

Front-line health-care workers are among the lowest-paid, most precarious, and most overworked employees in the health-care system.

In the aftermath of the worst of the COVID-19 pandemic, multiple mutually reinforcing crises that had long been percolating in health workforces across Canada finally bubbled over: widespread understaffing, unsustainable working conditions, stagnating pay against spiking inflation, and burnout. The pandemic highlighted that front-line health-care workers are among the lowest-paid, most precarious, and most overworked employees in the health-care system (Koontalay et al., 2021).

This report focuses on *allied health-care workers in Alberta.* Allied health-care workers are under-studied and under-appreciated. They form the backbone of the health-care system in community, tertiary, and acute care settings — yet, there is still a lack of research on inequalities among allied health-care professions. Allied health-care workers encompass a broad spectrum of roles. Each of these roles is integral to the functioning of a health-care system; however, research often tends to concentrate predominantly on doctors and nurses.

Broadly, we are focusing our analysis on health-care workers who are either trained professionals and members of professional organizations in Alberta or are general support employees in the health-care sector, but are not doctors or nurses. Allied health-care workers include professionals such as paramedics, occupational therapists, laboratory technologists and assistants, respiratory therapists, and counsellors, as well as support staff such as administrative support personnel and research assistants. We elaborate on the definition of the term "allied health-care workers" in the literature review section of the report.

Objectives and Data Collection

This research aims to explore systematic inequities, experiences of discrimination at work, stress and burnout, and opinions about the provincial health-care system changes among allied health-care workers employed in Alberta. We use three different data sources for our analyses.

Data provided by the Health Sciences Association of Alberta — HSAA, a trade union that represents approximately 29,000 paramedical technical, professional, and general support employees in the public and private health-care sectors — was used to examine the gender distribution of workers in different allied health-care positions. We examine pay inequities among different groups of allied health workers and explore whether these inequities are related to the gender distribution of workers within the professions, accounting for the education required for each profession.

In October 2024, we conducted a survey of allied health-care professionals in Alberta, receiving 1,788 responses. From these responses, we gathered

information on workers' demographic characteristics (gender, age, race /ethnicity, Indigenous status, dis/ability status, immigration status), their experiences of everyday discrimination in the work environment, their experiences of employment discrimination, the state of their mental health (including indications of job stress and burnout), their intention to stay in their job, and their opinions regarding the changes in the Alberta health-care system. We analyze this data to examine the gender distribution of the professions represented in the sample and whether certain professions are dominated by racialized groups. Next, we assess whether and how gender, age, and racial inequities impact workers' experiences (including experiences of everyday discrimination and job discrimination), job stress, signs of burnout, and career intention. Finally, we examine what workers are saying about the current changes to Alberta Health Services (AHS).

In December 2024 and January 2025, we conducted in-depth interviews with 23 allied health-care professionals in Alberta. We examine the themes that emerge in the interview data to elucidate the quantitative findings. The interviews focused on workers' experiences throughout their careers, including any experiences of stigma and discrimination, and their satisfaction with their careers. We also asked the workers to reflect on the impact of the proposed changes to Alberta Health Services. We present the themes that emerged from the interviews with illustrative quotes.

Research Questions

We address four overarching research questions in this report:

1. Are there pay inequities related to demographic characteristics or professional affiliation among allied health-care workers in Alberta?
2. Do allied health-care workers in Alberta face discrimination at work? Are their experiences of discrimination related to either their demographic characteristics or their professions?
3. What are the levels of job-related stress among allied health-care workers in Alberta? Are workers planning to leave their jobs? Do job stress, burnout, and likelihood of leaving their job vary by demographic characteristics or profession?
4. How do allied health-care workers in Alberta feel about the proposed changes to the provincial health-care system?

2. OVERVIEW OF THE LITERATURE – ALLIED HEALTH PROFESSIONALS

Allied health professionals make up approximately one-third to one-half of the health-care workforce in Alberta (Canadian Institute for Health Information [CIHI], 2022). The term 'allied health professionals' generally includes all professionally trained health-care workers except medical doctors or nurses. Allied health professionals require specialized training to perform their roles effectively. The level and type of training vary depending on the specific field or profession, but may include certificate programs, associate or bachelor's degrees, or post-graduate degrees (Nancarrow & Borthwick, 2021). This is a distinct yet disparate group of professionally trained health-care workers who work in both acute care and community settings. They play a vital role in the prevention, diagnosis, treatment, and rehabilitation of patients, working in collaboration with other health-care professionals to deliver comprehensive care and improve patient outcomes.

While the classification of which professions are included in 'allied health care' varies across countries (and even across provinces in Canada), formal occupational groupings that are usually part of the list include audiologists and speech language pathologists; physical, occupational, and respiratory therapists; diagnostic medical personnel such as laboratory and imaging specialists; nutritionists and dietitians; emergency medical personnel (e.g. emergency medical technicians and paramedics); counsellors, social workers, and psychologists; health information technologists; health educators; and pharmacy personnel. Additional, less well-known health-care occupational groupings are also included in the definition of "allied health professionals" (The Association of Schools Advancing Health Professions, 2015).

Around the world, allied health professionals are usually accredited by professional organizations to ensure that quality and industry standards are met. Most allied health professions require provincial or national licensure or certification to practice. In Canada, allied health professionals are regulated on a provincial basis, and inter-provincial labour mobility is difficult. This study focuses on allied health-care professionals in the province of Alberta in 2024-2025, most of whom are members of the Health Sciences Association of Alberta (HSAA).

Inequalities in the Allied Health Sector

A systematic review of 10 studies showed that allied health-care workers faced significant challenges and burdens during COVID-19 (Koontalay et al., 2021). The review highlighted four primary themes: inadequate preparedness; emotional challenges; insufficient equipment and information; and work burnout. These burdens impacted health-care workers' physical and mental well-being,

Recent studies continue to underscore the urgency of addressing workplace challenges among health-care workers.

contributing to anxiety, stress, and depression, and in severe cases, increasing the risk of post-traumatic stress disorder and burnout. The authors conclude that addressing these challenges through adequate support systems, improved preparedness, and better allocation of resources is critical to safeguarding health-care workers and maintaining health-care delivery standards during crises.

Recent studies continue to underscore the urgency of addressing workplace challenges among health-care workers. A 2023 review of studies published since 2015 highlights individual and organizational interventions aimed at reducing burnout and improving well-being for allied health workers (Cohen et al., 2023). Most of the interventions were targeted at individuals. Organizational approaches, although less common, included workload reduction and enhanced peer networks. Significant improvements were reported in well-being, resilience, and work engagement, along with reductions in burnout, anxiety, depression, and perceived stress with the organizational approaches. This review underscores the potential of targeted interventions in addressing the multifaceted challenges faced by allied health-care professionals.

In Newfoundland and Labrador, pay inequities between members of the Association of Allied Health Professionals (AAHP) and registered nurses have led to significant labour disputes. These workers argue that a 2015 Job Evaluation System (JES) created disparities in compensation, with allied health professionals in similar roles earning less than registered nurses despite similar qualifications. The union has called for a review of the JES to address these inequities. While the provincial government has offered wage adjustments, the AAHP remains dissatisfied, citing the need for a more comprehensive review. The union warns that without adequate compensation, the public healthcare system will suffer, as skilled workers are leaving for better conditions in other provinces or the private sector (SaltWire Network, 2025).

Numerous studies were conducted on allied health-care workers' experiences during the COVID-19 pandemic, and several studies have looked at disparities in pay and working conditions between allied health workers and other health professionals such as doctors and nurses (Coto et al., 2020, Stefler et al. 2021). The Canadian Institute for Health Information (CIHI) has compiled data on selected health professionals, including nurses and physicians, to inform on how the pandemic has impacted health-care workers and the care Canadians have received. These publications underscore the emphasis on physicians and nurses in Canadian health-care research, highlighting the need for more comprehensive studies that include allied health professionals (Canadian Institute for Health Information [CIHI], 2022). This study aims to address this gap by examining inequalities in pay, experiences of discrimination at work, stress, and burnout among allied health-care workers in Alberta.

The Alberta Context

The primary health-care service provider in Alberta is Alberta Health Services (AHS). Covenant Health, the second largest provider, accounts for approximately 4% of the provincial health-care services. AHS operates 106 acute care hospitals and five stand-alone psychiatric facilities; it offers health-care services at over 900 locations across Alberta, including continuing care facilities, cancer centres, and community health sites. AHS has more than 111,000 employees, including those who work at its subsidiaries Alberta Precision Laboratories, Carewest, and CapitalCare (Alberta Health Services, 2023).

Health-care workers are the foundation of Alberta's health-care system.

Health-care workers are the foundation of Alberta's health-care system. The most recent data from the College of Physicians and Surgeons of Alberta (2023) shows there are just over 12,000 physicians in the province (College of Physicians and Surgeons of Alberta [CPSA], 2023), and the most recent data from the College of Registered Nurses of Alberta indicates there are over 45,000 nurses in Alberta (College of Registered Nurses of Alberta, 2023).

It is difficult to calculate the exact number of allied health-care professionals in Alberta due to the diverse range of professions included. Each year, CIHI collects, verifies, and reports aggregated data on supply, age, and sex for 31 health-care professional groups in Canada. In 2021, CIHI reported 58,000 health-care professionals in Alberta, excluding physicians and nurses (Canadian Institute for Health Information, 2023). This number includes professionals such as pharmacists and dentists, many of whom are privately employed in Alberta. We therefore estimate that allied health professionals make up approximately one-third to one-half of the health-care workforce in Alberta. The HSAA represents approximately 29,000 of these workers in the public and private sectors (HSAA, 2025).

As of June 2025, AHS operates as the main organization responsible for planning and delivering health services across the province. However, under the leadership of Premier Smith, AHS is undergoing reforms and restructuring. In November 2023, Alberta's government launched a plan to restructure its health-care system by creating four provincial agencies, focused on primary care, acute care, continuing care, and mental health and addiction. The Health Statutes Amendment Act, enacted in May 2024, "enables the transition to a unified health-care system of 4 sector-based provincial health agencies" (Health Statutes Amendment Act, 2024).

Under this plan, the Primary Care sector will be responsible for overseeing and coordinating primary care services and providers, including family doctors and primary care networks. The Acute Care sector will be responsible for overseeing the delivery of hospital care, urgent care, cancer care, clinical operations, surgeries, and emergency medical services. The Continuing Care sector will oversee and coordinate long-term care services, home care, and supportive living accommodations. The Mental Health and Addiction sector will be responsible for delivering care related to mental health and addiction, both in inpatient and outpatient settings, for children and adults. (Alberta Health Services, 2024).

Two agencies — Recovery Alberta and Primary Care Alberta — have already been established. Primary Care Alberta (https://primarycarealberta.ca/) became operational in November 2024, purportedly aiming to provide Albertans with access to a family doctor or primary care team while easing the burden on emergency departments. Recovery Alberta was formed in September 2024 to centralize mental health and addictions services. Acute Care Alberta, set to launch in 2025, would focus on reducing wait times and improving care efficiency (Farrell, 2024). And finally, Assisted Living Alberta, which will include long-term care and home care, will also be established in 2025.

There has been much public controversy concerning these reforms. Critics, including Alberta's doctors, nurses, and health advocacy groups, have raised serious concerns about moves toward privatization. Both the Alberta Medical Association (which represents physicians) and the labour union United Nurses of Alberta have stated that the changes could drive health-care workers out of the province without improving patient care or reducing costs.

The advocacy group Friends of Medicare has also criticized the plan as politically motivated (The Canadian Press, 2024). The New Democratic Party (NDP) has expressed concerns about potential disruptions to patient care and the loss of a unified health-care system, arguing that the proposed changes could lead to increased bureaucracy and fragmentation, potentially affecting the quality and accessibility of health-care services for Albertans (Mulcahy, 2024).

In light of these proposed changes, this is an especially important time to investigate the situation of allied health-care workers in Alberta. In addition to examining inequities among allied health-care workers and their stress levels, we take the opportunity to ask them about the proposed health-care reforms in the province.

3. METHODS

We draw on three sources of data — two quantitative and one qualitative — for our investigation of allied health-care workers' experiences in Alberta. The combination of quantitative and qualitative approaches provides a more comprehensive understanding of a phenomenon than either approach alone, as it leverages the benefits of both methods. We start with the quantitative analysis and use the qualitative data to add richer detail, illuminate our quantitative findings, and strengthen our conclusions (Creswell & Creswell, 2018). In this report, we employ a partially mixed sequential design, where the quantitative phase is dominant (Leech & Onwuegbuzie, 2009). While we prioritize the quantitative analysis, the qualitative data allows us to explore our quantitative findings in more depth and creates a richer understanding.

We received ethics approval for all three phases of data collection, analysis, and reporting from the Conjoint Faculties Research Ethics Board at the University of Calgary (REB24-0352).

HSAA Data

We received access to de-identified data on all allied health workers who are HSAA members. This dataset included information on job title, sex, gender, and age. This was then merged with data retrieved from documents on the AHS website, including job classifications and collective agreements. These documents provided the minimum educational requirements and the minimum and maximum hourly wages for each job title. We were able to match 97% of the job titles with their corresponding wage and education data. We calculated the median hourly wage for each job title and used the minimum education requirement listed in the job classifications as our measure of education.

This data allows us to examine the distribution of all of the allied health occupations represented in HSAA. We then use this data to examine the gender composition of each occupation, the median pay, and the average level of education needed at hiring for each occupation. We conduct a statistical analysis of all the workers in the dataset to assess whether gender is related to wages, and we then examine whether the gender composition of each occupation is correlated with the average wage for that occupation.

Survey Data

During the second phase of the study, we conducted a survey of HSAA members. We offered incentives (a prize draw for gift cards) to encourage participation and received 1,778 complete responses. The survey included multiple choice questions about the participants' job (job title, length of time at the job, and level of education), demographic information (gender, age, race/ethnicity, Indigenous status, dis/ability status, immigration status, marital status, number of children),

health questions (levels of anxiety, depression, and stress), job satisfaction questions (work stress, job strain, and intentions to exit), as well as questions about experiences of discrimination at work. We analyze this data using univariate and multivariate descriptive and inferential statistics.

The survey also included two open-ended questions, one asking for respondents' opinions about the proposed changes to the AHS structure and the other requesting any further information about their experience as an allied health professional that they wished to share. We use thematic analysis to examine this data for patterns and themes (Braun & Clarke, 2006), and pull quotes from this data to illustrate some of our quantitative findings. A copy of the survey questions is included in Appendix A.

Interviews

After we had completed preliminary analysis of the quantitative data, we conducted 23 semi-structured interviews with representatives from various disciplines in the allied health workforce, recruiting survey respondents who agreed to be contacted for further data collection. Interviews were between 45 minutes and one hour long. We offered an incentive to compensate for interviewees' time. Interviews were conducted via Zoom and transcribed through computer-generated transcripts and human confirmation. The interviews focused on the workers' experiences, including what they liked about their careers, any experiences of stigma and discrimination they had faced at the workplace, and their opinions about the AHS proposed changes. A copy of the interview guide is included in Appendix B.

4. WHO ARE THE ALLIED HEALTH-CARE WORKERS IN ALBERTA?

HSAA Data

This section presents an overview of the allied health-care workforce in Alberta, summarizing the HSAA membership data. This overview provides a description of the allied health-care workforce and will enable us to examine how representative our survey data is (see the following section of the report).

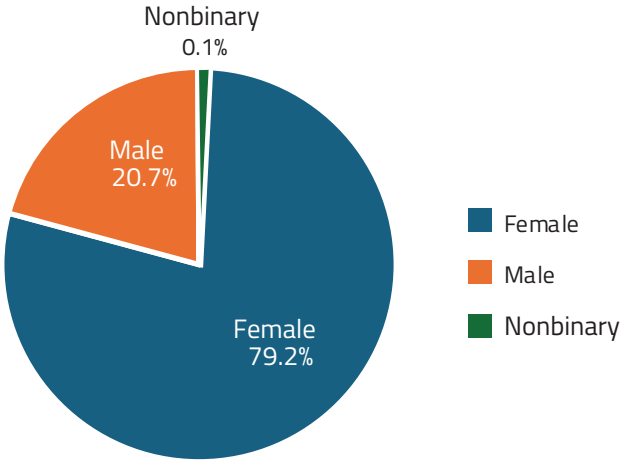
Employer

There are 28,436 employee records in the HSAA data. Ninety-six per cent of those (27,293) work for AHS, while the remaining 4% (1,143) work for Covenant Health.

Gender

Data on gender is only available for 83% of the individuals in the HSAA dataset, as gender information is missing for 4,962 individuals (17%). There are 18,592 people who identify as female (79.2% of those for whom we have gender information), 4,864 (20.7%) who identify as male, and 22 (.1%) who identify as nonbinary.

Figure 1: Gender of HSAA Members



Note: N = 23,474.

Age

We have data on age for 22,799 of the individuals in the HSAA dataset, as 5,637 are missing age information. The average age is 42.47, with a standard deviation of 11.12. Members range in age from 18 to 83. The median age is 41, and 50% of the employees are between 34 and 50.

Women and men do not differ significantly on age. Nonbinary people, however, are younger on average than others in the dataset. Their average age is 31.33, with a standard deviation of 5.16, and ages range from 23 to 42.

Profession

The HSAA data contains 161 distinct job titles (we combined levels within each job title so that, for example, Social Worker 1 and Social Worker 2 would both be classified as 'Social Worker'). Seventy-six of those titles have fewer than 15 people (less than .1% of the total), which is why we do not display those job titles in our list. We list the top 85 job titles (those that have at least 15 people with that title in the HSAA dataset) in Appendix C. We will be analyzing 22 of the top 25 job titles in detail, as explained later in the report.

There is no additional demographic information available in the HSAA dataset.

Survey Sample

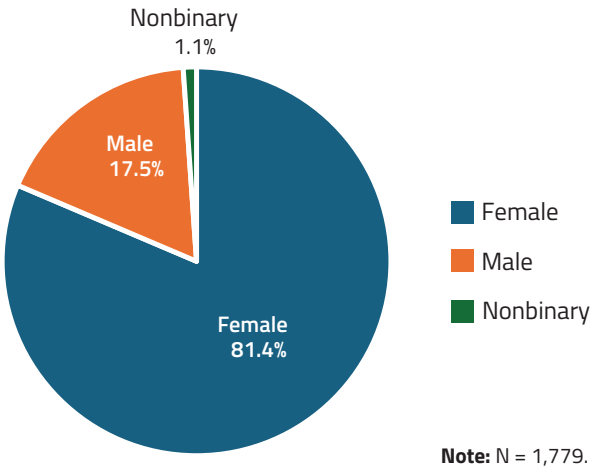
Employer

There are 1,788 people in our survey sample. Most employees (1,714 or 96%) report that they work for AHS, while the remaining 74 (4%) work for Covenant Health. This distribution of employers matches exactly the distribution of employers in the HSAA data.

Gender

We have data on gender for 99.5% of the respondents (nine survey respondents did not specify their gender). There are 1,448 women (81.4%), 312 men (17.5%) and 19 people (1.1%) who identify as nonbinary. The gender distribution in the sample is very close to the gender distribution in the HSAA data, with the sample containing a slightly lower percentage of males and a slightly higher percentage of females and those who identify as nonbinary compared to the HSAA data.

Figure 2: Gender of Survey Respondents



Note: N = 1,779.

Age

We have data on age for 99.7% of the respondents (six respondents did not specify their age). The average age of respondents is 43.51, with a standard deviation of 10.82. Respondents range in age from 18 to 76. On average, respondents are slightly older than the overall HSAA membership.

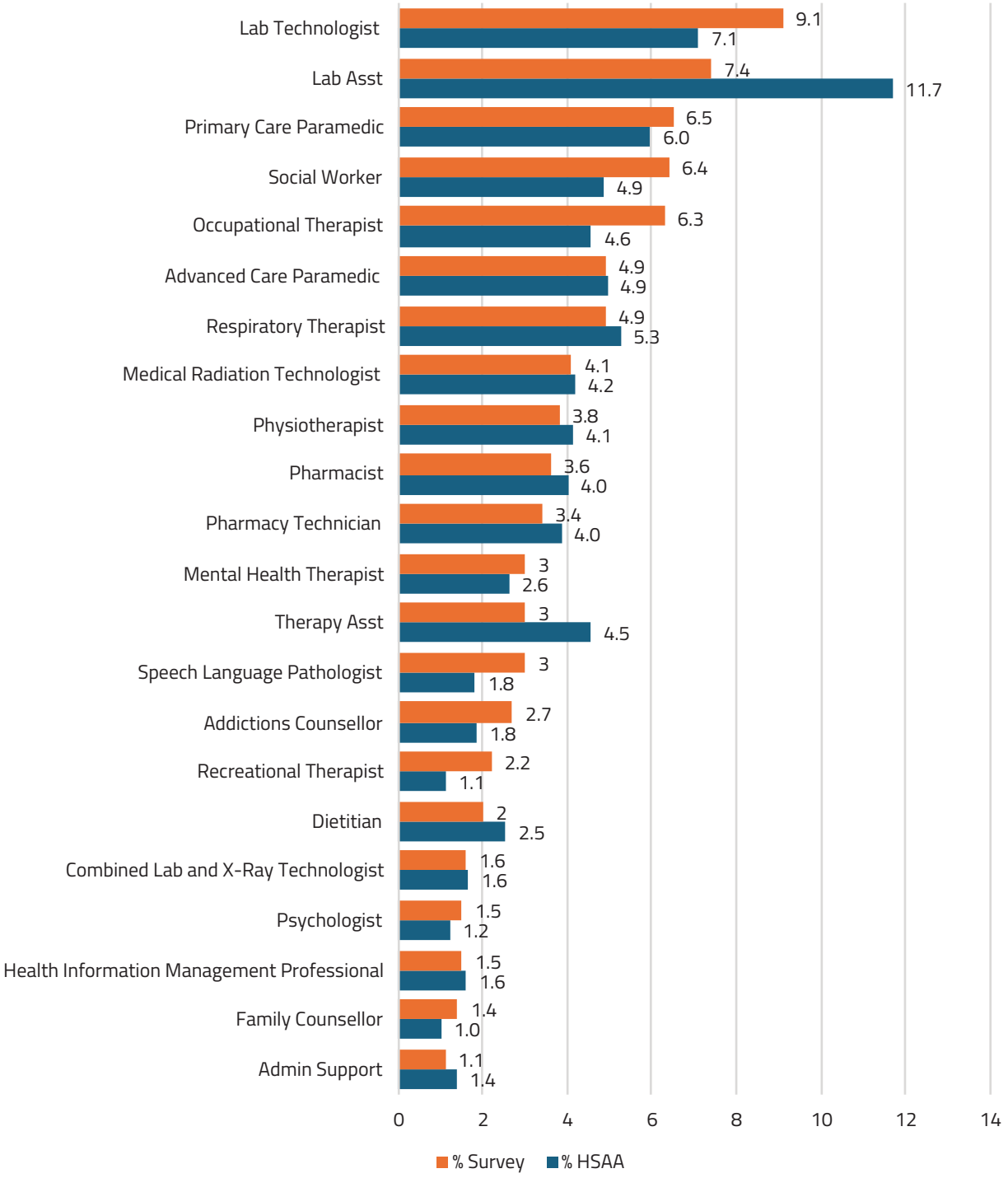
Profession

The survey data contains 94 distinct job titles (58% of the total job titles included in the HSAA data). Fifty-eight of these titles contain five or fewer respondents, which is why we do not include them in this report. We provide a table illustrating the 36 job titles that contain more than five respondents in Appendix D.

For the remainder of this report, when we examine differences between specific allied health-care professions, we will focus on the 22 job titles that have the most respondents in the survey (the top 22 job titles in Appendix D). Since all of these job titles are also included in the top 25 list for the HSAA data, we believe that our survey data contains a good representation of the most common job titles in the HSAA data. Three out of the top 25 job titles in the HSAA data are missing representation in our survey data: Emergency Communications Officer, Diagnostic Sonographer, and Public Health Inspector.

A list of the 22 professions we will focus on for the remainder of the report, including the percentage of people in each job in both the HSAA and the survey data, is shown in Figure 3 below.

Figure 3: Distribution of Job Titles in Survey and HSAA Data



Notes: Survey data N = 1,746. HSAA data N = 28,436.

We asked survey respondents about several demographic characteristics that are not available in the HSAA data.

Length of Time in the Profession

On average, survey respondents had been working in their profession for almost 16 years (15.89, standard deviation 10.36). Some respondents had just started this year, and some had worked in their profession for over 50 years.

Disability Status

Of the 1,767 (98.8% of the total sample) who answered the question on disability status, 334 or 18.9% identified as having a disability. This figure compares to a national rate of 27% for persons aged 15 years and over in Canada in 2022 (Statistics Canada 2023).

Race/Ethnicity

A total of 1,756 people (98.2% of the sample) answered the question about race/ethnicity. Of those, 378 (21.5%) identified as being part of a visible minority or Indigenous group. The distribution of the various racial/ethnic groups chosen by survey respondents is shown in Table 1 below. In the 2021 Canadian Census, 26.53% of the population identified as being from a visible minority group and 5% identified as being Indigenous (Statistics Canada, Census, 2021). Thus, our respondents were less diverse than the Canadian population as a whole in terms of race and ethnicity.

Table 1: Race/Ethnicity of Survey Respondents

Race/Ethnicity	N	Percent	Valid %
Arab	8	0.4	0.5
Black	30	1.7	1.7
Chinese	82	4.6	4.7
Filipino	40	2.3	2.3
Indigenous	32	1.8	1.8
Japanese/Korean	13	0.7	0.7
Latin American	15	0.8	0.8
South Asian	52	2.9	3.0
Southeast Asian	11	0.6	0.6
Mixed	95	5.4	5.4
White	1,378	78.5	78.5
Missing	32	1.8	
	1,788		

Due to the small numbers of people in each specific racial/ethnic group and the potential for individual allied health-care workers to be indirectly identified in this report, for the remainder of the report we combine the non-white respondents into one group and use the term "visible minorities" and Indigenous people to refer to non-white people, without examining the details of the different racial/ethnic groups. Please note that we recognize that different terminology may be used to capture the difference between whites and other groups. Some people prefer the term "racialized minorities." We are using the term "visible minorities" in alignment with Statistics Canada terminology. In this report, we frequently present data from "visible minorities" and Indigenous people together, in order to avoid identification of individual respondents.

Immigration Status

Almost 14% of respondents (246) were born outside of Canada. Of those who responded to the question of when they immigrated to Canada (231), 108 (46.8%) immigrated 25 or more years ago, 87 (37.7%) immigrated between 10 and 24 years ago, and 36 (15.6%) immigrated less than 10 years ago. According to Statistics Canada, in the 2021 Census, immigrants (defined as individuals who are or have ever been landed immigrants or permanent residents) made up 23% of Canada's total population (Statistics Canada 2022). Thus, our sample contains a smaller proportion of immigrants than in the Canadian population as a whole.

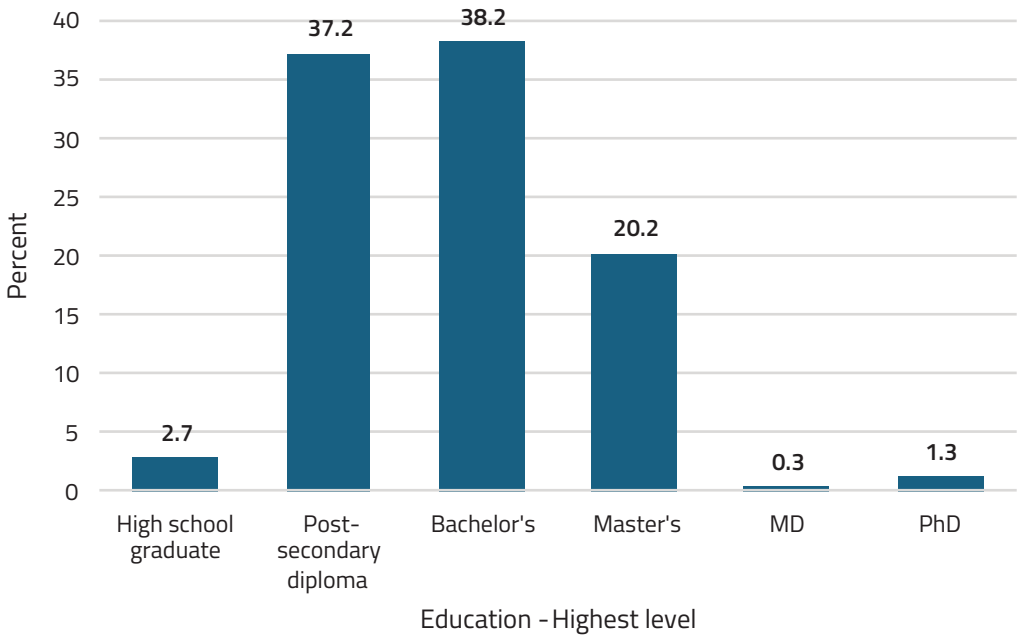
Education

We asked respondents to record their highest level of education. Respondents' education is summarized in Table 2 and illustrated in Figure 4 below.

Table 2: Survey Respondents' Education

	Frequency	Percent	Valid %	Cumulative %
High school graduate	49	2.7	2.7	2.8
Post-secondary diploma	664	37.1	37.2	40
Bachelor's	683	38.2	38.2	78.2
Master's	360	20.1	20.2	98.4
MD	6	0.3	0.3	98.7
PhD	23	1.3	1.3	100
Total	1,786	99.9	100	
System	3	0.1		
	1,788	100		

Figure 4: Survey Respondents' Education



Most respondents (1,673, 93.6%) received their highest level of education in Canada. One hundred and fifteen respondents (6.4%) received their education outside of Canada. The most common countries listed were the US, the Philippines, India, and Nigeria.

Marital/Family Status

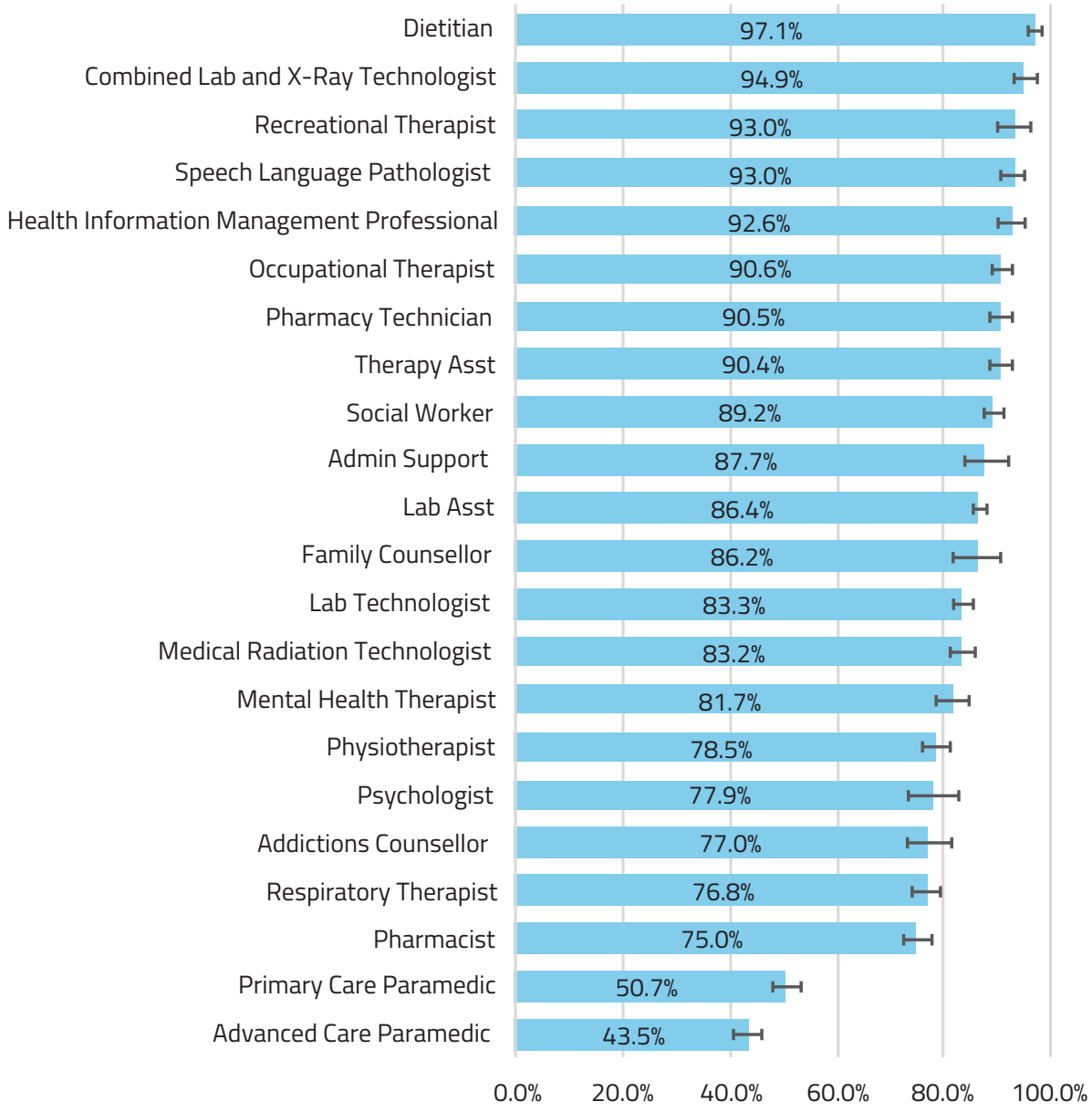
We asked respondents about their marital status and whether they had children.

Of the 1,766 who responded to the marital status question, 1,244 (70.4%) were married, 194 (11.0%) were separated or divorced, 310 (17.6%) were never married, and 18 (1%) were widowed. Almost 60% of respondents have children (1,039), and almost 40% (705) report having children under the age of 18 living at home.

Job Titles and Demographics

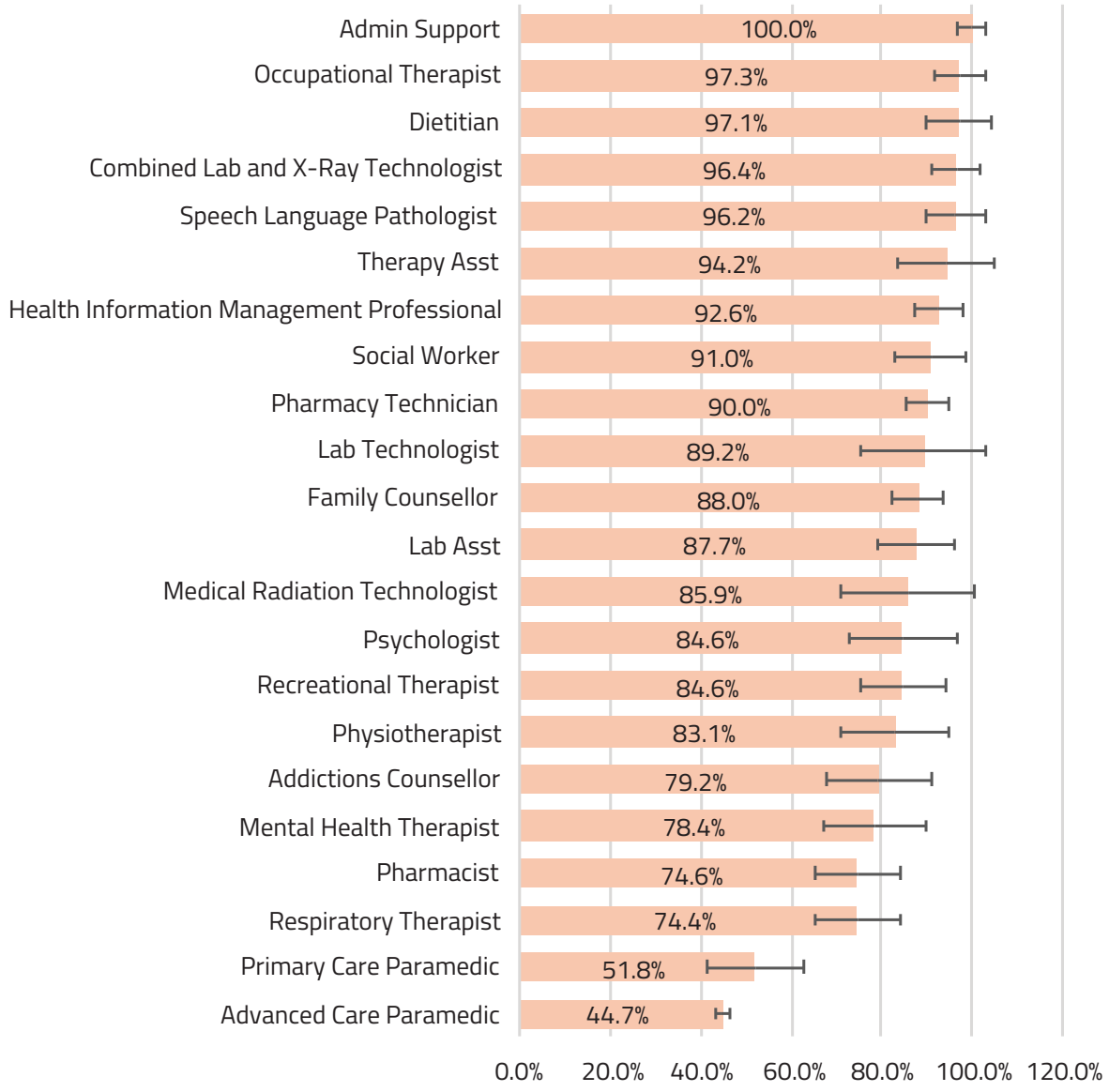
Focusing on the top 22 job titles described above, we examined the demographic composition of each of the allied health professions. Figures 5 and 6 below show the percentage of females in each job title for the HSAA data and the survey data, respectively, and Figure 7 shows the percentage of visible minorities in each job category from the survey data. The job titles are ranked in each figure from highest percentage (female or visible minority) to lowest.

Figure 5: Job Titles, Percent Female (HSAA data)



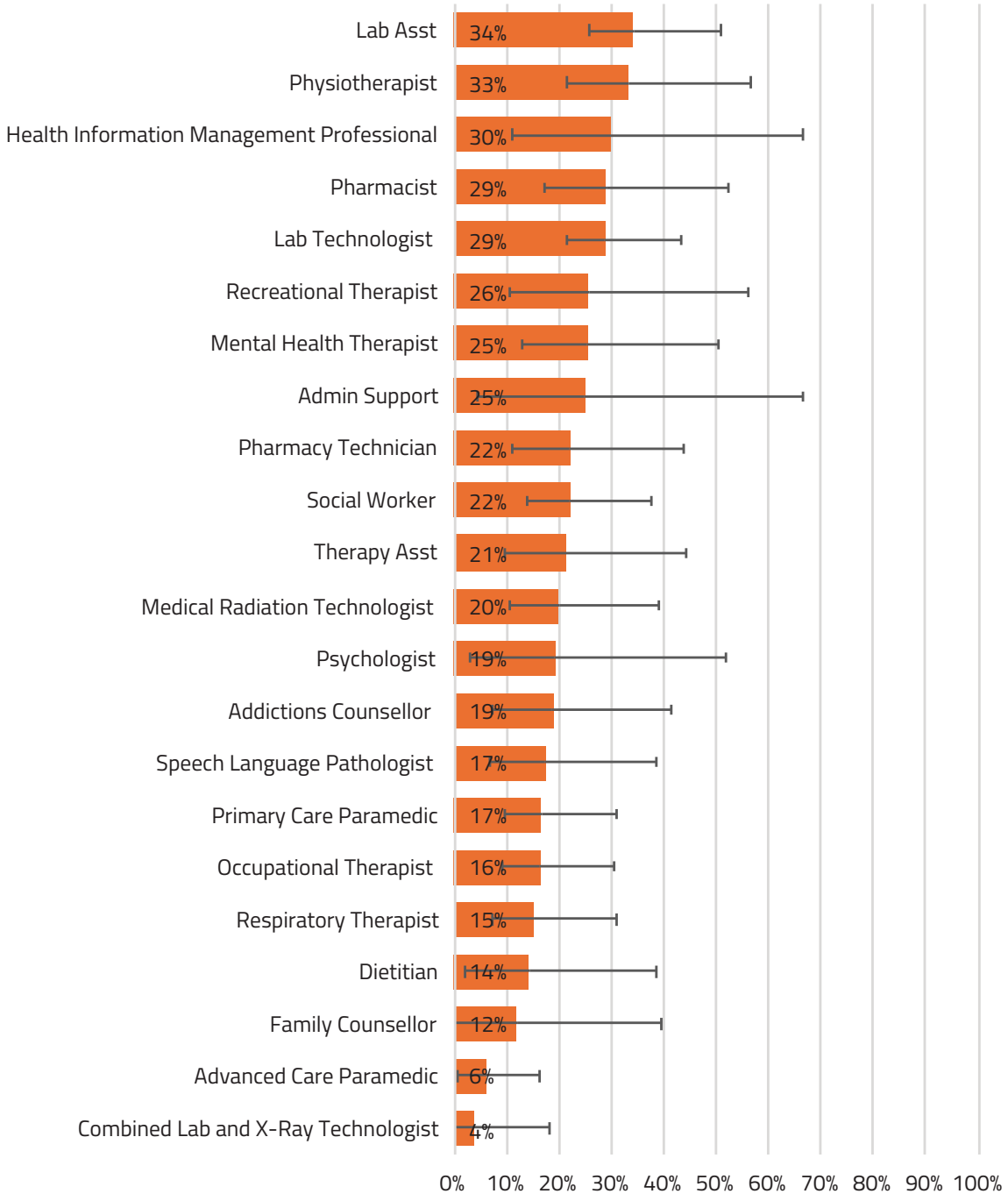
Notes: Mean and 95% confidence interval shown. HSAA data. N = 23,747.

Figure 6: Job Titles, Percent Female (Survey Data)



Notes: Mean and 95% confidence interval shown. Survey data. N = 1,756.

Figure 7: Job Titles, Percent Visible Minority



Notes: Mean and 95% confidence interval shown. Survey data. N = 1,756.

Allied health-care workers in Alberta are mostly married women, educated at a post-secondary level or above.

Figures 5 and 6 clearly illustrate how female-dominated these professions are. In the HSAA data, the top eight professions are all over 90% female, and the next seven are over 80% female. In the survey data, the top nine professions are all over 90% female, and the next seven are over 80% female.

There are some minor statistically significant differences among the professions in the HSAA data when we examine the percentage of females (for example, dietitians are 97.1% female, while lab technologists are 83.3% female; this difference is statistically significant). The biggest difference in the datasets, however, is that primary care paramedics and acute care paramedics are significantly less likely to be female. In the HSAA data, primary care paramedics are 50.7% female and acute care paramedics are 43.5% female. In the survey data, primary care paramedics are 51.8% female and acute care paramedics are 44.7% female. These two professions stand out in the list of allied health-care professions for being either close to gender neutral or male-dominated.

In terms of the distribution of visible minorities within professions, significant differences are seen when we compare lab assistants (34% visible minorities), physiotherapists (33%), and lab technologists (29%) with advanced care paramedics (6%) and combined lab and x-ray technologists (4%).

Although our survey data is based on a convenience, rather than a random sample, the survey respondents are fairly representative of the population of HSAA employees in terms of gender, age, and profession. We are not able to assess the representativeness across other demographic variables such as race/ethnicity and immigration status as this data is not available in the HSAA dataset.

To conclude this section of the report, allied health-care workers in Alberta are mostly married women, educated at a post-secondary level or above. They are diverse in racial and immigration background, but not as diverse as the Canadian population as a whole. Nearly one in five identify as having a disability, but this is fewer than the Canadian average nationally.

5. WAGE INEQUITIES

This section summarizes our findings related to our first major research question: *Are there pay inequities related to demographic characteristics or professions among allied health-care workers in Alberta?* We addressed this question using both the HSAA data and the survey data.

HSAA Data Findings on Wage Inequities

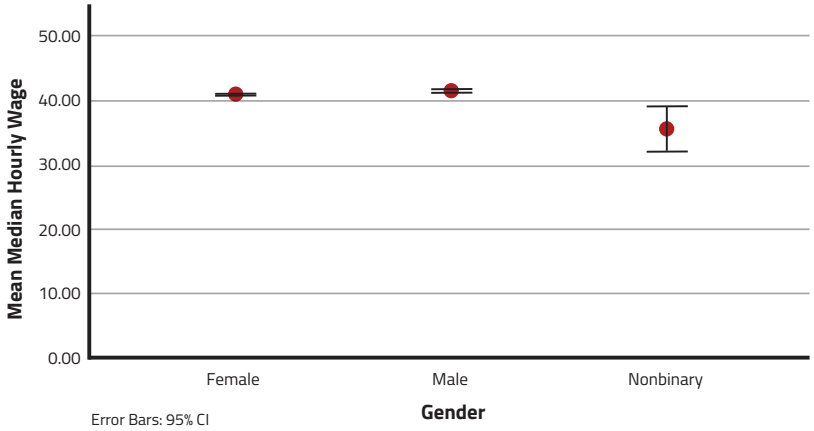
We have median hourly wage data for 28,393 individuals in the HSAA dataset. (Note that all of this data is based on median wage per hour, irrespective of whether the employee is full-time or part-time. The mean median hourly wage for all HSAA members is $41.75, with a standard deviation of 6.82. The minimum is $18.59 and the maximum is $60.92. Table 3 below shows the mean median hourly wage by gender for the respondents for whom we have information on gender (N = 23,438).

Table 3: Gender and Median Hourly Wage, HSAA Data

	N	Mean	Std. dev.	Std. error	95% CI	
Female	18,567	42.12	8.77	0.06	41.99	42.25
Male	4,849	42.45	8.05	0.12	42.22	42.67
Nonbinary	22	37.35	7.64	1.63	33.96	40.74
Total	23,438	42.19	8.63	0.05	42.08	42.30

The mean median hourly wage for men is slightly higher than for women ($42.45 versus $42.12), but the difference is not statistically significant. However, on average, individuals who identify as nonbinary make significantly less ($37.35) than both men and women. Figure 8 below illustrates these differences. Note that the number of nonbinary individuals is quite small, so these results should be interpreted with caution.

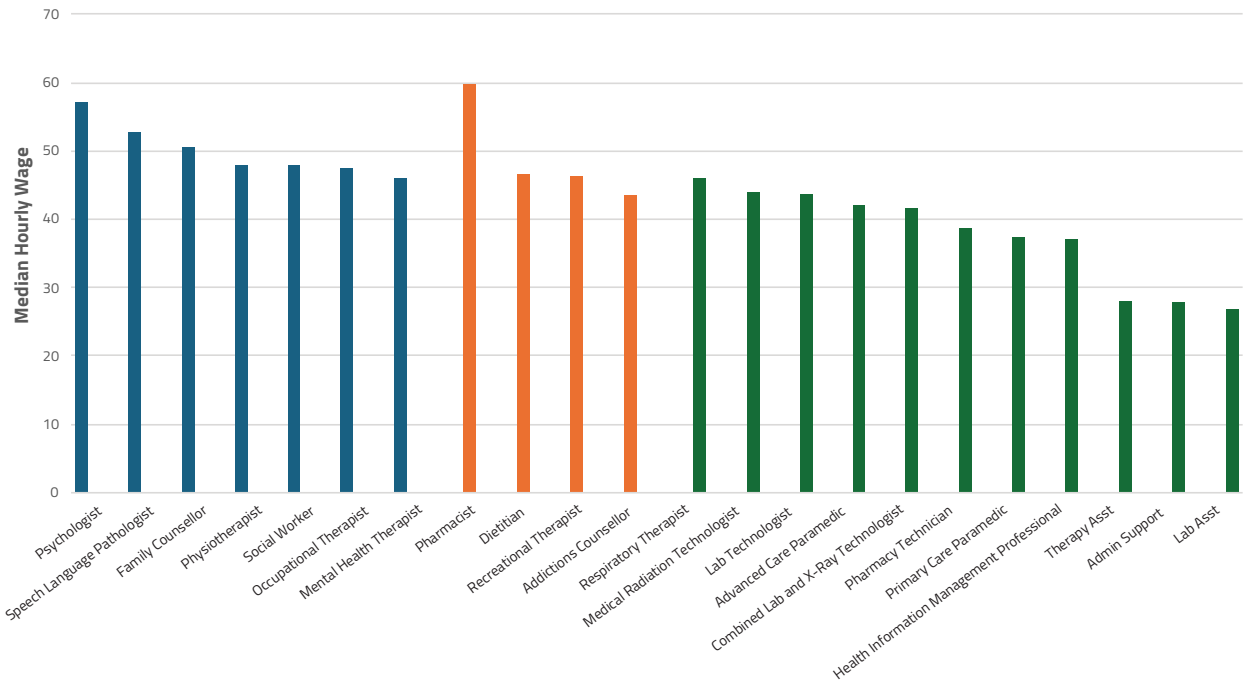
Figure 8: Gender and Median Hourly Wage, HSAA Data



In our survey sample, those who identified as nonbinary tended to be younger than those who identified as male or female, so we acknowledge that we must also account for age to understand the effect of gender on wages.

Importantly, the minimum education required for a job is also highly correlated with wages. Figure 9 below shows the median hourly wage for each of the 22 professions, ranked from high to low, clustered by the level of education required for the job.

Figure 9: Median Hourly Wage by Job Title, Clustered by Minimum Education Required



Note: Required education: blue = master's; orange = bachelor's; green = diploma/certificate.

In order to assess the joint effects of age, education, and gender on median hourly wage, we examined the relationship of all these variables together with median hourly wage. Table 4 below shows the results from a regression analysis that examines the effect of age, required education, and gender on median hourly wage.

Table 4: The Effects of Age, Education, and Gender on Median Hourly Wage

	Unstd. coeffs.		Sd. coeffs.	T	Sig.
	B	**Std. error**	**Beta**		
Age	-0.016	0.004	-0.02	-3.82	<.001
Education required	5.85	0.05	0.62	114.68	<.001
Female*	-1.443	0.11	-0.07	-12.64	<.001
Nonbinary*	-4.119	1.49	-0.02	-2.76	0.006
(Constant)	23.009	0.26		89.24	<.001
Adjusted Rsq	.37				

Note: *Reference = male. Education entered as a continuous variable. HSAA data. N = 22,154.

Once we control for age and the education required for a job, both women and nonbinary individuals make significantly less than men.

Noting that the effects of all of the variables are statistically significant at p <.01, Table 4 illustrates that once we control for age and the education required for a job, both women and nonbinary individuals make significantly less than men.

These results indicate that on average, once you control for a person's age and the education required for a particular job, females make $1.44 less an hour than males, and those who identify as nonbinary make $4.12 less an hour than males. We note that the numbers for those who identify as nonbinary are based on a small number of individuals, relative to the number of males and females. Thus, although these findings are statistically significant, we should interpret them with caution.

Another way to examine the HSAA data is to compare aggregated data for individual professions. We calculated the percentage of female employees in each of the 144 job titles that had more than one person in the HSAA data. Figure 10 below shows the relationship between the median hourly wage and the percentage of females in each of our 22 top job titles.

Figure 10: Median Hourly Wage and Percent Female by Profession, HSAA Data

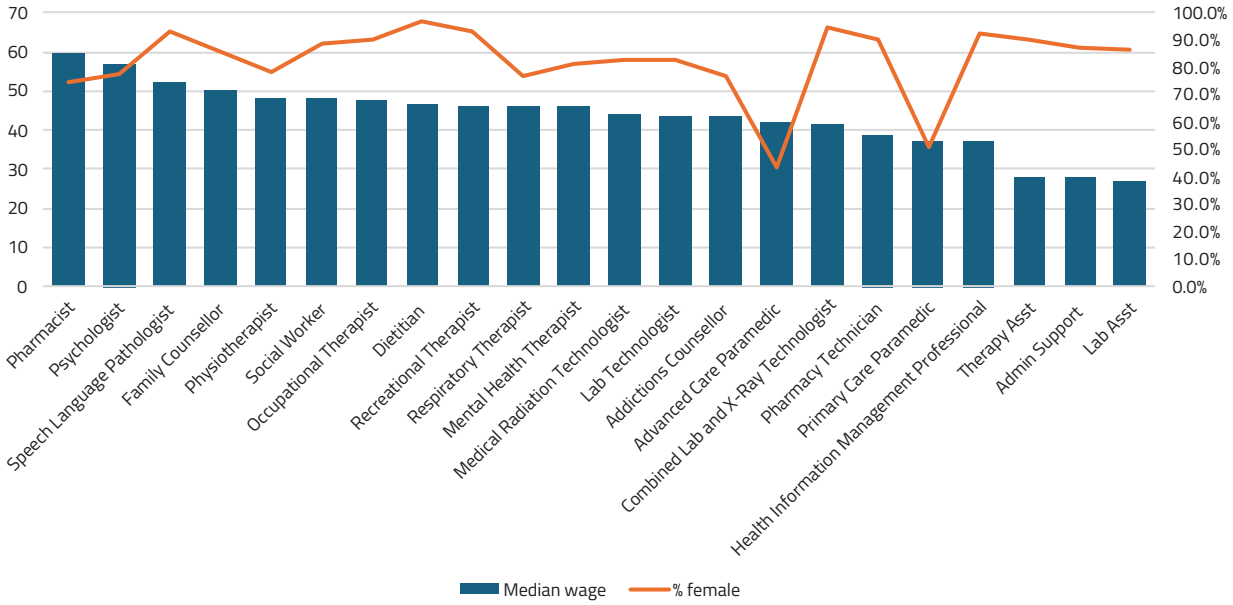


Figure 10 hints at the relationship between percent female and hourly wage, with some of the highest percent female jobs (dietitian and administrative support, for example) not making the highest wages. We examine this relationship more thoroughly using a multivariate model to assess whether, controlling for the education required for the job, the percentage of female employees in the profession is related to the median hourly wage. Results from this analysis are shown in Table 5 below.

Table 5: The Effects of Education and Percent Female on Median Hourly Wage, by Profession

Variable	Coefficient	Std Error	Stdized Beta Coeff	Sig.
Min. education	7.100	.585	.722	<.001
Percent female	-3.609	1.802	-.119	.047
(Constant)	19.584	2.286		<.001
Adj. Rsq	.503			

Note: N = 144 professions. Aggregate HSAA data.

The effects of education and percent female are significant at p <.05. These results indicate that once you control for the education required for the profession, the percentage of females in the profession lowers the median hourly wage. For every extra percent of females in the profession, the median hourly wage goes down by $3.6.

Survey Data Findings on Wage Inequities

We were able to assign profession and gender to 1,727 of the respondents in the survey (97%). The average median wage in the survey data is $43.14/hour, with a standard deviation of 7.92. The minimum is $22.91 and the maximum is $60.92. On average, our survey respondents make slightly more than the HSAA members.

Table 6 and Figure 11 below show the average median hourly wage by gender for the survey respondents.

Table 6: Gender and Median Hourly Wage, Survey Data

	N	Mean	Std. dev.	Std. error	95% CI	
Male	300	42.97	7.25	0.42	42.15	43.80
Female	1408	43.18	8.04	0.21	42.76	43.6
Nonbinary	19	42.99	9.47	2.17	38.43	47.6
Total	1727	43.14	7.92	0.19	42.77	43.52

Figure 11: Gender and Median Hourly Wage, Survey Data

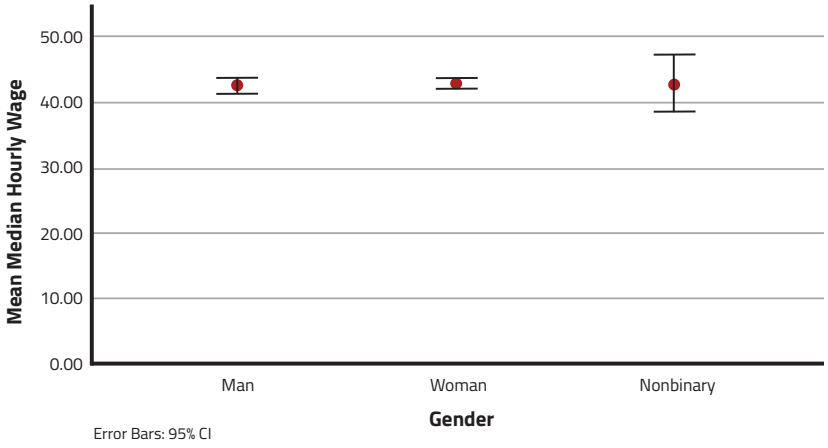


Table 6 and Figure 11 illustrate that although on average, female and nonbinary survey respondents make slightly more than male respondents ($43.18 and $42.99 compared to $42.97), none of these differences is statistically significant.

Recognizing that we need to account for additional individual-level variables that affect wages, Table 7 below shows the results from a regression analysis that examines the effect of age, education, length of time in the profession, and gender on median wage.

Table 7: The Effects of Age, Education, Length of Time in Profession, and Gender on Median Hourly Wage

	B	Std. error	Beta	T	Sig.
Age	-0.167	0.024	-0.229	-6.879	<.001
Education	4.748	0.184	0.531	25.748	<.001
Female*	-0.884	0.426	-0.043	-2.074	0.038
Nonbinary*	-1.761	1.619	-0.023	-1.088	0.277
How long have you worked in this profession (years)?	0.252	0.026	0.33	9.857	<.001
(Constant)	29.025	1.074		27.029	<.001
Adjusted Rsq	.288				

Notes: *Reference = male. Education entered as a continuous variable. Survey data. N = 1,720.

All of the variables except nonbinary have a significant effect on median hourly wage at p <.05. Age decreases the wage, length in the profession increases the wage, and education (greatly) increases the wage.

Once we control for age, education and the number of years in the profession, we notice that females and nonbinary individuals make less than men, although the result for the nonbinary comparison is not significant. Table 7 illustrates that, on average, women who answered the survey make 88 cents less than men an hour when controlling for age, education, and the length of time in the profession.

Since we have additional demographic variables in the survey data, we are able to further expand on this analysis to include other individual-level variables that may affect wages. Table 8 shows the effect of age, education, gender, length of time in the profession, disability status, and visible minority status on median hourly wage.

Table 8: The Effects of Age, Education, Length of Time in Profession, Gender, Disability Status, and Visible Minority Status on Median Hourly Wage

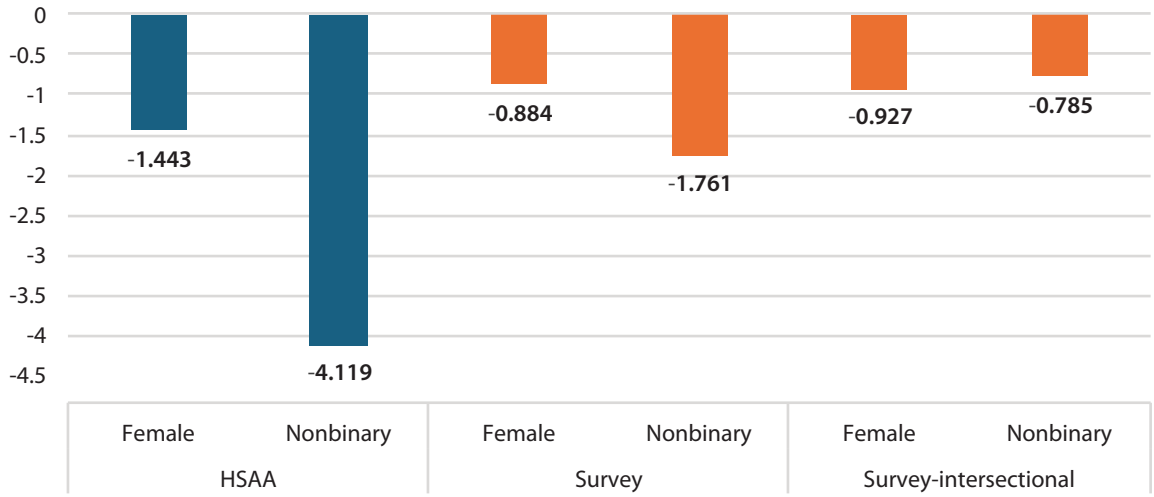
	Unstd. coeff.		Std. coeff.	T	Sig.
	B	Std. error	Beta		
Age	-0.167	0.024	-0.229	-6.83	<.001
Education — Highest level	4.869	0.186	0.543	26.119	<.001
Female*	-0.927	0.43	-0.045	-2.156	0.031
Nonbinary*	-0.785	1.677	-0.01	-0.468	0.64
How long have you worked in this profession (years)?	0.245	0.026	0.32	9.418	<.001
Have disability	-0.894	0.421	-0.044	-2.125	0.034
Visible minority	-1.307	0.402	-0.068	-3.255	0.001
(Constant)	29.147	1.078		27.05	<.001
Adjusted Rsq	.30				

Notes: *Reference = male. Education entered as a continuous variable. Survey data. N = 1,685.

When examining the results in Table 8, it is important to note that all of the variables except nonbinary have a significant effect on wages at p <.05. This table illustrates that intersecting social identities affect median hourly wage among allied health-care workers in Alberta. It also shows that, as well as being female, having a disability and being a member of a visible minority group lowers your median hourly wage. Being female lowers one's hourly wage by 92 cents compared to men, having a disability lowers one's hourly wage a further 89 cents, and being a visible minority lowers one's wage by $1.31 compared to non-visible minorities.

Figure 12 below summarizes the overall effects of gender on median wage across the two datasets.

Figure 12: The Predicted Effect of Gender on Median Hourly Wage, Controlling for Age and Education



Notes: Reference category = male. HSAA model N = 22,154, controls for age and education. Survey model N = 1,720, controls for age, education, and length of time in profession. Survey intersectional model N = 1,685, controls for age, education, length of time in the profession, disability status, and visible minority status.

Women make less than men, people with disabilities make less than those without disabilities, and visible minorities make less than non-visible minorities.

Note that all the models in Figure 12 control for age and education, and the intersectional model also controls for length of time in profession, disability status, and visible minority status. Also, the finding for the comparison between males and those who identify as nonbinary is only significant in the HSAA data, due to the small sample size in the survey data.

Summary – Wage Inequities

To conclude Section 5, we have found that once we account for the effects of age and education, women make less than men in the allied health-care professions in Alberta. Controlling for the education required for a profession, professions that have a higher percentage of females are worse paid than those with a lower percentage of females. And our survey data shows us that three intersecting axes of inequality — gender, disability status and visible minority status — affect pay among allied health-care workers in Alberta. Controlling for age, education, and length in the profession, women make less than men, people with disabilities make less than those without disabilities, and visible minorities make less than non-visible minorities.

6. DISCRIMINATION

This section summarizes our findings related to our second major research question: *Do allied health-care workers in Alberta face discrimination at work? Are their experiences of discrimination related to their demographic characteristics or their professions?*

We define discrimination as negative or unfair treatment of an individual due to their identity (Onufrio, 2013). While sociologists have derived various measures of discrimination, both from the perspective of the perpetrator (measures of bias or prejudice) and the perspective of the victim (experiences of discriminatory events or incidents) (Samuel & Verma, 2010), surveys assessing respondents' perceptions of discrimination are generally accepted as the most inclusive way to measure discrimination (Galabuzi, 2010).

We examine two types of discrimination at work. The first is 'everyday discrimination', and the second is employment-related discrimination.

Everyday discrimination

Everyday discrimination was measured using the Everyday Discrimination Scale (EDS), originally developed for use in health research (Williams et al., 1997). We utilize the revised five-item EDS, developed and validated in 2011 (Stucky et al., 2011). This measure asks about several forms of discrimination that occur in daily interpersonal interactions. We adjusted this question to focus on discrimination at work, with the following wording:

"In your day-to-day life at work, since you have worked for your current employer, how often have any of the following things happened to you?"

You are treated with less courtesy or respect than other people.
You receive poorer service than other people.
People act as if they think you are not as smart as other people.
People act as if they are afraid of you.
You are threatened or harassed.

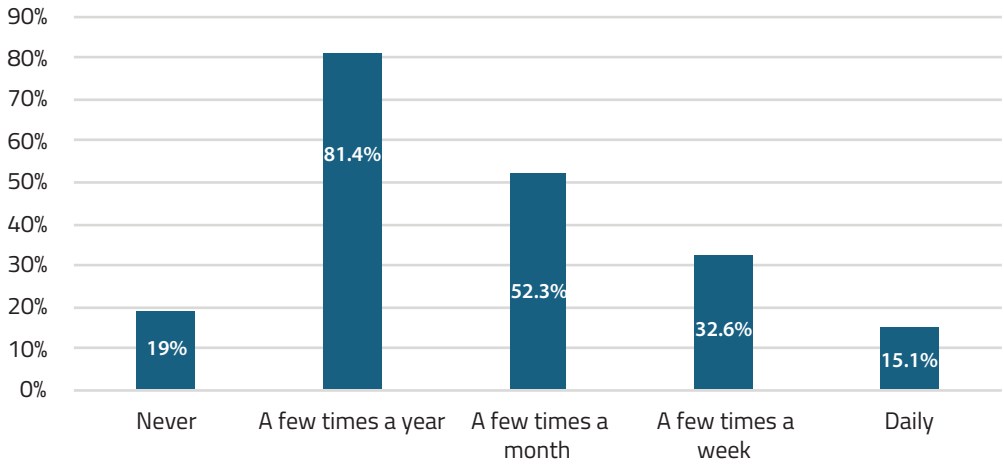
For each of the five items, respondents were asked how frequently each item happens to them with the following choices: *Almost every day; At least once a week; A few times a month; A few times a year*, *Less than once a year; Never*. Eighty-six respondents did not answer all of these questions, so we have data on everyday discrimination for 1,702 respondents (96%).

We combine the five types of behaviours and examine the frequency with which at least one of the behaviours has been experienced by respondents. Table 9 and Figure 13 below illustrate how often respondents report experiencing everyday discrimination at work.

Table 9: Frequency of Everyday Discrimination at Work

Discrimination frequency	Number	Percent (/1702)
Never	323	19
At least a few times a year	1,379	81
At least a few times a month	888	52
At least a few times a week	553	32
Daily	259	15

Figure 13: Frequency of Experiencing Everyday Discrimination at Work



It is notable that only 19% of allied health-care workers in our survey report *never* experiencing everyday discrimination at work. Over 80% of responders report experiencing discrimination at work at least a few times a year. This compares to under 23% of Canadians who reported experiencing everyday discrimination at least a few times a year in a national survey in 2013 (Godley, 2018) and only 9% of Canadians who reported experiencing discrimination *in the workplace* in the past six months in 2016 (Nangia & Arora, 2021).

Over 50% of allied health-care workers report experiencing discrimination at work at least a few times a month, 32% report experiencing it at least a few times a week, and 15% report experiencing discrimination at work daily. These numbers are extremely high and speak to the experiences of front-line health-care workers dealing with the public and their colleagues.

In the qualitative comments collected at the end of the survey, many respondents described the negative impact of these frequent experiences of discrimination at work.

> *"The abuse we suffer is more often than not from the public and our patients. We represent the front-line and take the brunt of people's frustrations with the health-care system. There's only so much empathy and compassion a human can have before it's beaten out of them, especially when there's little to no support from management." (Survey respondent)*

> *"We are treated like servants and not as humans. People are so quick to disrespect us as if we are not also people. Their demands and expectations are extremely unreasonable." (Survey respondent)*

> *"The treatment of health-care workers is deplorable. In no other profession are you required to accept daily abuse, being spat at, sworn at, swung at with absolutely no support from anywhere." (Survey respondent)*

> *"I think often that allied health workers are treated poorly and undervalued because the jobs are traditionally held by women, leading to us being underpaid and undervalued by the system and government." (Survey respondent)*

Everyday Discrimination and Demographic Variables

Here we assess who is most likely to report experiencing discrimination, examining the relationship between demographic variables and the frequency of experiences of discrimination on the job. Wanting to focus on those who experience discrimination at least monthly, we restrict our analysis to those who report experiencing discrimination at work at least a few times a month (monthly), at least a few times a week (weekly), and daily.

Table 10 below examines the bivariate relationship between demographic variables (gender, visible minority status, immigrant status, and disability status) and the frequency of everyday discrimination.

Table 10: Frequency of Everyday Discrimination and Demographic Variables

	N	Monthly % (95%CI)	Weekly % (95%CI)	Daily % (95%CI)
Overall	1,702	52 (50-54)	32 (30-35)	15 (13-17)
Gender				
Male	297	56 (51-62)	40 (34-45)*	19 (14-23)
Female	1,381	51 (49-54)	31(28-33)	14 (12-16)
Nonbinary	18	50 (24-76)	33 (9-57)	17 (-2-36)
Visible minority				
Visible minority	357	52 (46-57)	34 (29-39)	16 (12-19)
Nonvisible minority	1,327	52 (50-55)	32 (30-35)	15 (13-17)
Immigrant status				
Non-immigrant	1,481	53 (50-55)	33 (30-35)	15 (13-17)
Immigrant	221	49 (42-56)	32 (25-38)	17 (12-22)
Disability Status				
Has disability	324	67 (62-72)*	44 (38-49)*	21 (17-26)*
No disability	1,377	49 (46-51)	30 (27-32)	14 (12-16)

*Statistically significantly higher than comparison groups in category (at p<.01).

Sixty-seven percent of people with disabilities report experiencing discrimination monthly.

Table 10 illustrates that there is no direct effect of visible minority status or immigrant status on the frequency of experiencing everyday discrimination at work. However, there is a gender effect where males are more likely than women and those who identify as nonbinary to report experiencing everyday discrimination weekly (40% compared to 31% and 33% respectively). There is also an effect of disability status. Those who identify as having a disability are more likely than those who do not have a disability to report experiencing everyday discrimination at work at all frequencies. Sixty-seven percent of people with disabilities report experiencing discrimination monthly, 44% report experiencing discrimination weekly, and 21% report experiencing discrimination daily.

Examining the relationship between additional demographic variables and the frequency of experiencing discrimination, age was negatively correlated with experiencing discrimination monthly (corr. -.066, p <.01). The length of time in the profession was also negatively correlated with experiencing discrimination monthly (corr. -.059, p <.01). Education was negatively correlated with experiencing discrimination monthly (corr. -.131, p<.001), weekly (corr. -.151, p <.001) and daily (corr. -.140, p<.001), indicating that those with higher levels of education experience discrimination less frequently.

Tables 11-13 show the joint effect of all the demographic variables (age, length of time in the profession, gender, education, visible minority status, immigrant status, and disability status) on the likelihood of experiencing everyday discrimination monthly, weekly, and daily.

Table 11: Logistic Regression of Monthly Everyday Discrimination on Demographic Variables

Variable	B (SE)	Sig	Exp(B)
Age	-.008 (.008)	.299	.992
Length of time in profession	-.006 (.008)	.426	.994
Education	-.307 (.060)	<.001	.736
Female	-.196 (.134)	.144	.822
Nonbinary	-.678 (.514)	.188	.508
Visible minority	.035 (.138)	.801	1.035
Non-immigrant	.039 (.167)	.814	1.040
Disability	.784(.136)	<.001	2.191
(Constant)	1.684 (.400)	<.001	5.389

Note: N = 1,669.

Education and disability have a significant effect on monthly discrimination at p<.001. Those with higher levels of education are less likely to report experiencing monthly discrimination, while those with a disability are more likely to report experiencing monthly discrimination.

Table 12: Logistic Regression of Weekly Everyday Discrimination on Demographic Variables

Variable	B (SE)	Sig	Exp(B)
Age	.001 (.008)	.922	1.001
Length of time in profession	-.011 (.009)	.192	.989
Education	-.399 (.066)	<.001	.671
Female	-.381 (.138)	.006	.683
Nonbinary	-.614 (.536)	.252	.541
Visible minority	.131 (.147)	.370	1.141
Non-immigrant	-.017 (.179)	.923	.983
Disability	.658 (.133)	<.001	1.931
(Constant)	1.067 (.421)	.011	2.906

Note: N = 1,669.

Education, gender, and disability have a significant effect on monthly discrimination at p<.01. Those with higher levels of education are less likely to report experiencing weekly discrimination. Females are less likely than males to experience discrimination, and those with disabilities are more likely to experience weekly discrimination.

Table 13: Logistic Regression of Daily Everyday Discrimination on Demographic Variables

Variable	B (SE)	Sig	Exp(B)
Age	.003 (.010)	.742	1.003
Length of time in profession	.001 (.011)	.951	1.001
Education	-.508 (.089)	<.001	.602
Female	-.273 (.172)	.113	.761
Nonbinary	-.367 (.671)	.585	.693
Visible minority	.098 (.189)	.602	1.104
Non-immigrant	-.309 (.221)	.163	.734
Disability	.551 (.164)	<.001	1.735
(Constant)	.346 (.532)	.515	1.414

Note: N = 1,669.

> "I really feel that more should be done for some of us front-facing, lower-paid staff who are dealing with mean, belligerent people all day."
>
> (Survey respondent)

Education and disability have a significant effect on daily discrimination at p<.001. Once again, those with higher levels of education are less likely to experience daily discrimination, while those with disabilities are more likely to experience daily discrimination.

Tables 11 to 13 illustrate that, similarly to the bivariate results, once we control for all the demographic variables, the most important variables affecting the likelihood of experiencing discrimination are education, gender, and disability status.

Education is protective against experiencing everyday discrimination monthly, weekly, and daily. Allied health-care workers who are in positions that require more education are less likely to report experiencing discrimination.

> *"I really feel that more should be done for some of us front-facing, lower-paid staff who are dealing with mean, belligerent people all day."*
> (Survey respondent)

We find that those who identify as having a disability are more likely to experience discrimination monthly, weekly, and daily. One survey respondent commented the following with regards to having an 'invisible' disability of mental illness:

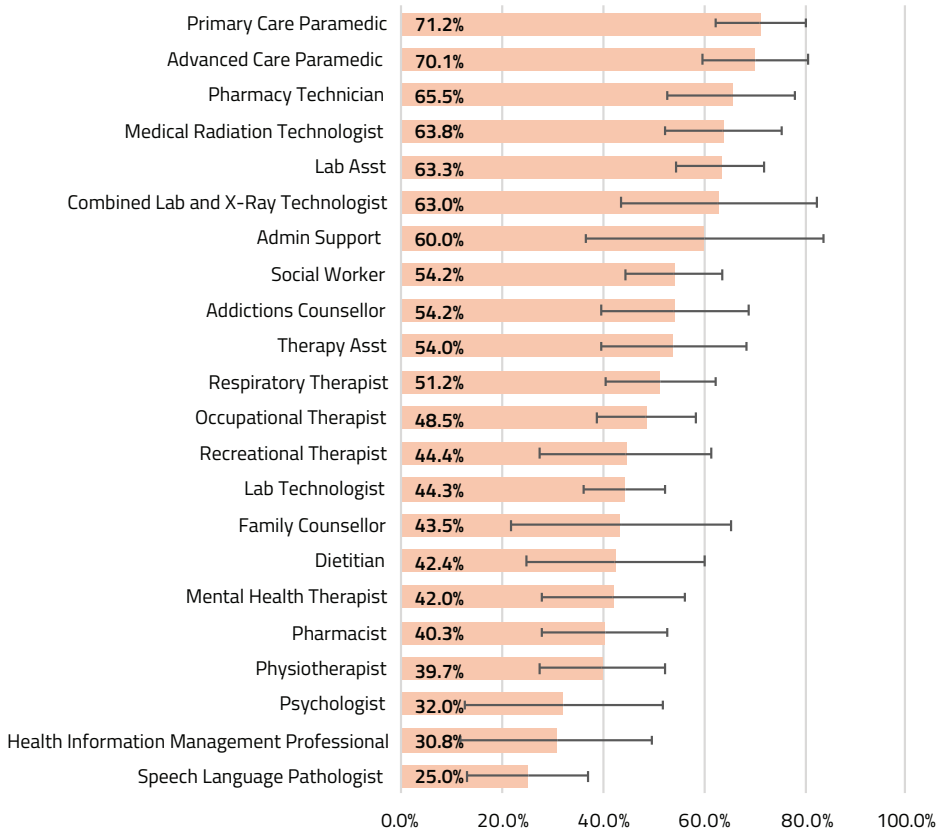
> *"Diversity and inclusion efforts haven't included people with mental illness. Generally, the workplace is not a very supportive atmosphere. We say we value diversity, but people don't see invisible issues and assume I don't have any issues because mine are not visible."*
> (Survey respondent)

Women are less likely than men to experience everyday discrimination weekly, but there are no gender effects on monthly or daily experiences of discrimination. These findings regarding everyday discrimination among allied health-care workers highlight the importance of understanding the experiences of those in jobs that require less education, and especially those living with disabilities.

Everyday Discrimination and Profession

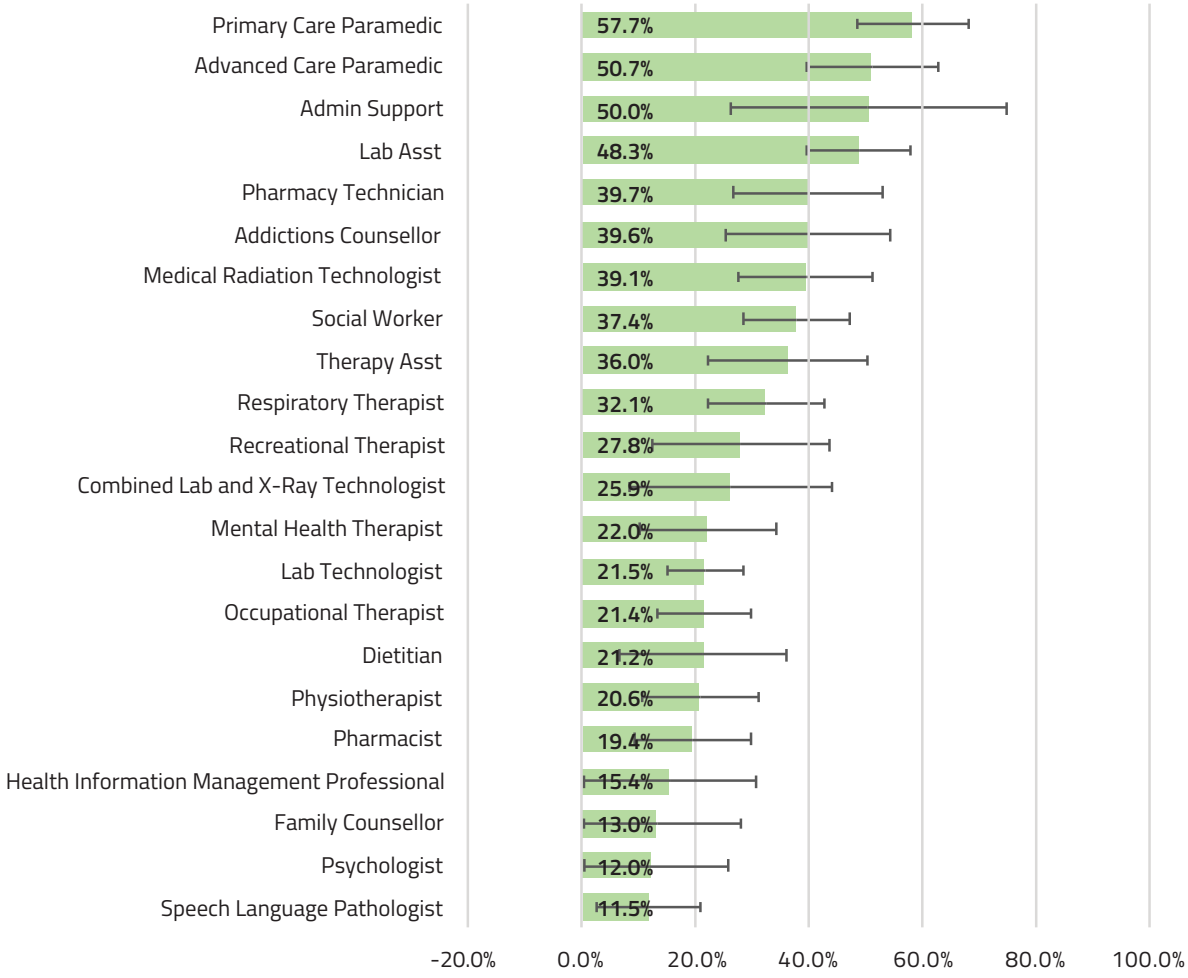
Here we examine the relationship between profession and everyday discrimination at work. Figures 14-16 illustrate the percentage of respondents in each job title who report experiencing everyday discrimination at work monthly, weekly, and daily, respectively. Each chart is organized with the job title reporting the highest levels of discrimination at the top, descending to the lowest levels.

Figure 14: Job Title and Monthly Experiences of Everyday Discrimination



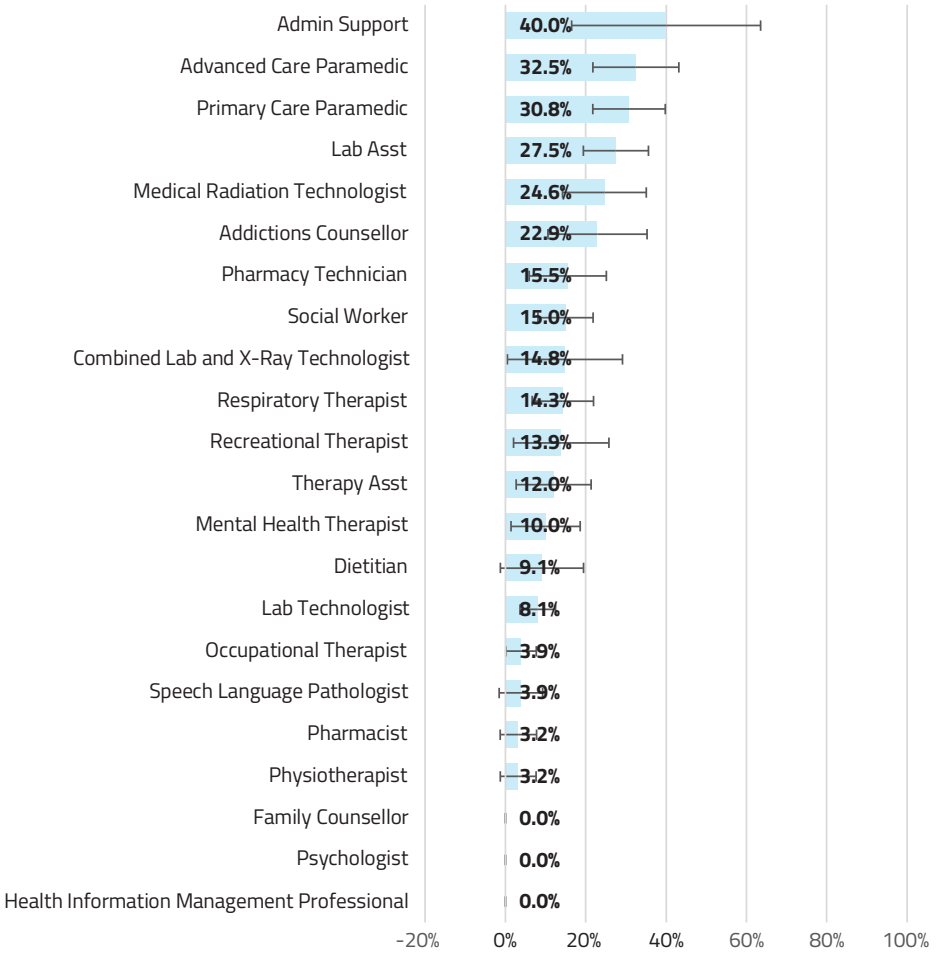
Notes: Survey data. N = 1,665. Mean and 95% CI shown.

Figure 15: Job Title and Weekly Experiences of Everyday Discrimination



Notes: Survey data. N = 1,665. Mean and 95% CI shown.

Figure 16: Job Title and Daily Experiences of Everyday Discrimination



Notes: Survey data. N = 1,665. Mean and 95% CI shown.

Professions that report experiencing the highest levels of discrimination… are all front-line staff who deal directly with patients/clients as they interact with the health-care system, often in acute care settings.

Although many of the confidence intervals overlap in Figures 14 to 16 (suggesting that there are no statistically significant differences between the professions), there are some clear patterns. Professions that report experiencing the highest levels of discrimination at all frequencies include primary care paramedics, acute care paramedics, administrative support staff, lab assistants, pharmacy technicians, and medical radiation technologists. These are all front-line staff who deal directly with patients/clients as they interact with the health-care system, often in acute care settings.

> *"Allied health workers get no acknowledgement or thanks. We work just as hard as nurses and yet are constantly forgotten about. I haven't had a raise in 10 years. I work acute care and microdose trauma on a daily basis just like other acute care workers. Patients are sicker, heavier, and more rude. It's thankless."* (Survey respondent)

> *"Lab is often looked down on by nursing and physicians. They expect everything done immediately even though our department is 10% the size of nursing. The professional respect is not there and is a big factor in the amount of stress me and my department face."*
> (Survey respondent)

The next group who report experiencing high levels of discrimination includes addictions counsellors, therapy assistants, and social workers. These are also front-line staff, many of whom deal with people in distress. Many workers in these professions feel they are undervalued compared to other professions.

> *"Addiction counsellors do the exact same job and have the same level of training and experience as mental health clinicians and they make less money."* (Survey respondent)

> *"Addictions counsellors with a master's degree in psychology get paid less with the same or more experience than a mental health therapist. And we are expected to provide the same supports when needed by the organization."* (Survey respondent)

The lowest levels of everyday discrimination are reported by dietitians, pharmacists, psychologists, speech language pathologists, and health information management professionals. We note that these professionals either do not interact directly with patients (in the case of health information management professionals) or interact with patients in a more controlled environment, usually not in acute care settings.

Reasons for Everyday Discrimination

Respondents who felt they had faced everyday discrimination were asked what they thought the reasons were for that discrimination. For all individuals who indicated they had ever experienced discrimination (81%, or 1,379), we included a list of reasons (see survey in Appendix A). We also allowed respondents to write in additional reasons that we may not have captured. Respondents were allowed to select as many reasons as they wished. Table 14 below presents a chart of the reasons respondents listed for everyday discrimination. We only list reasons that were checked off or written in by at least 10 respondents.

Table 14: Reasons for Everyday Discrimination

Everyday discrimination reason	Number	Percent (/1,379)
Age	485	35
Sex	467	34
Social class (education or income)	357	26
Race	182	13
Part of the job	181	13
Weight	157	11
Other physical	139	10
Shade of skin	120	9
Ancestry/national origins	119	9
Gender	115	8
Hierarchy/seniority	108	8
Bad management	89	7
Height	83	6
Personality	71	5
Religion	50	4
Disability	46	3
Coworkers' disagreements	45	3
Sexual orientation	44	3
Pregnancy	29	2
Neurodiversity	19	1
Mental health	17	1

Notes: Reasons in italics were written in by respondents. Respondents were allowed to choose more than one reason, so total does not sum to 100%.

Allied health-care workers have become so used to experiences of discrimination that they are considered almost mundane.

The most common reasons cited for experiences of everyday discrimination at work are age, sex, social class, and race. These are also the most typical reasons cited for discrimination in the Canadian population (Godley, 2018). Surprisingly, a number of respondents answered this question with job-related reasons for discrimination. A full 13% of respondents state that everyday discrimination is just 'part of the job'. This illustrates that allied health-care workers have become so used to experiences of discrimination that they are considered almost mundane. Respondents also wrote in organizational reasons for discrimination, such as hierarchy/seniority and bad management. Some examples illustrating different reasons for discrimination from the qualitative data collected are included next.

Sex

Respondents experienced sex discrimination both from co-workers and patients.

> *"There is definitely a lot of misogyny... It's a very male-dominated field... I was the only woman on my team. I had one team lead told me that he didn't need any more women on his team because all they do is get injured and pregnant... women aren't as strong, women aren't as able to.. that was directly said to me, that there could never be a team of all women because we're not strong enough. In my current job, mostly with patients, there are some folks who won't necessarily work with me or kind of respect me because I am a woman. I find it does kind of depend on a patient demographic type thing. It's generally, like, older males that feel that way. It is less direct though; it's more indirect."*
> (Interviewee – social worker)

> *"I have had a few instances where I have felt like I'm not taken seriously or my voice almost goes unheard in a meeting where I've said something, and then a male coworker has said the exact same thing right after me, and he's the one getting the praise."*
> (Interviewee — lab tech)

Social Class

Some respondents commented on the lack of diversity in terms of social class backgrounds among allied health-care workers and wondered how this might affect patients.

> *"Most health-care workers are from higher SES backgrounds, and this appears to be even more true for management, resulting in poor awareness of the ongoing challenges of those who come from less privileged backgrounds and continue to struggle as a result. We need to consider that not all allied health-care workers are females from higher SES backgrounds that are married to a breadwinner — I perceive that the system is set up like this. The reality is different for many people. I am a female breadwinner from a low SES background and continue to struggle. I do not see anyone like me in leadership positions, and rarely among colleagues. It is frustrating to watch people who are well-off, and have a lack of knowledge and understanding due to being born into privilege, provide health care for the mass public who generally have less privilege. The whole public system reflects this, actually. We need more diversity representing social background."*
> (Survey respondent)

Race

Respondents described experiences of racism both on an individual and an organizational level.

> *"A lot of patients assume I am new to this country because I look like an immigrant, when I've lived here almost my entire life. They say things like 'You speak English very well, where did you learn English?' or 'You're used to warm weather, how are you handling Canadian winters?' Or always asking me where I am from and assuming I'm NEW to Canada. It can be frustrating to always have to correct people, sometimes I don't even bother."*
> (Survey respondent)

> *"I feel very underappreciated and undervalued as a laboratory technologist. As an 'unseen' profession, even other health-care workers don't seem to understand my scope of practice or educational background, often confusing me with lab assistants (phlebotomists with high school education). Let alone having the public understand or government officials. A lot of lab techs are of diverse ethnicities and backgrounds, as they are immigrants due to the shortage of workers. I've seen people be dismissive toward them because of this."*
> (Survey respondent)

> *"There is racism in AHS. It appears that foreign-trained workers in the organization are being unfairly targeted for 'shadowing', monitoring, etc."* (Survey respondent)

> *"I came into the office. And she made a comment, and I kind of responded, and I said, well, we're going to do Chinese food or something at the house. And she felt it was appropriate to pull her eyes to the side of her head and start mocking the Chinese language. And calling me chinky chinky…So I never got an apology. I was so… stunned by the comment, I just, I went back to my office and did my job, and I left very shortly… After I tried to bring this to HR, there was never an apology. There was never anything done about it."*
> (Interviewee — addictions counsellor)

Hierarchy

Many survey respondents commented on the fact that they experienced discrimination due to hierarchy in the health-care system, where doctors and nurses are perceived to be treated with more respect than other professionals.

> *"I am routinely treated disrespectfully by nurses and MDs. In order to manage stresses/expectations of the job, I have to remain strategically under-employed (part-time or casual) so I can recover between work days."* (Survey respondent)

> *"Allied health tends to be treated as 'second-class citizens' by nursing. We are not supported by hospital management."* (Survey respondent)

> *"Allied health is kind of the forgotten child in a lot of discussions. People do not realize how many workers are not a doctor/nurse and subsequently don't seem to care about our status, contract, working conditions or waitlists — until they need us."* (Survey respondent)

Bad Management

Many survey respondents also complained about bad management.

> *"AHS is the most toxic workplace I have ever experienced. Management treats everyone except their 'favourites' horribly and with disrespect. There is no work/life balance. It's a terrible existence to work there that drags your mental health down to the gutter."* (Survey respondent)

"AHS is the most toxic workplace I have ever experienced."

(Survey respondent)

Employment Discrimination

Following the questions about everyday discrimination at work, we asked survey respondents about their experiences of employment discrimination using the following questions:

Have you ever been unfairly fired?
Have you ever been unfairly not hired?
Have you ever been unfairly denied promotion?

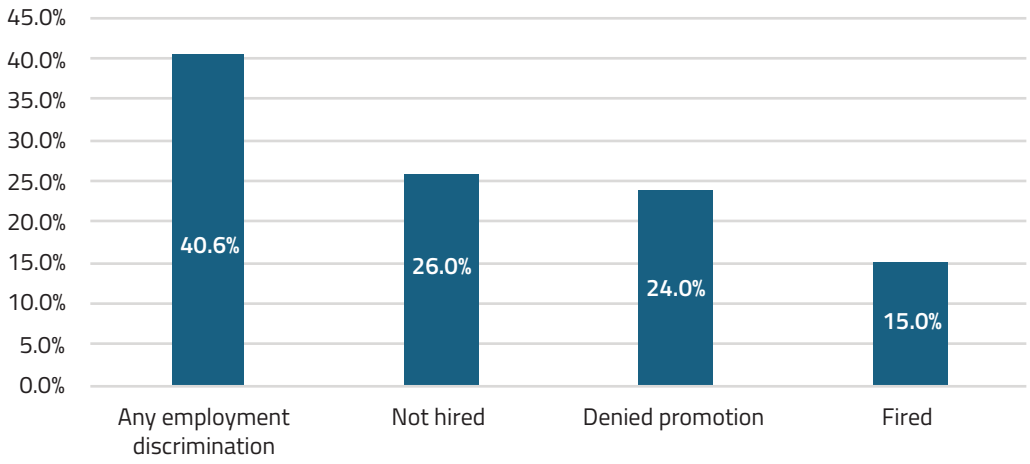
We had 1,688 responses to these questions (data was missing for 100, or 6%, of respondents). Of those who responded, 684, or 40.5%, indicated that they had experienced at least one of these forms of job discrimination. Overall, 15% said they had been unfairly fired, 25% had been unfairly not hired, and 23% had been unfairly denied promotion.

While 374 people (22.2%) said they had experienced only one of these forms of job discrimination, 226 people (13.4%) said they had experienced two of these forms of job discrimination, and 84 (5% of the sample) said they had experienced all three forms of job discrimination.

The correlation between fired and not hired was .221, between fired and denied promotion was .213, and between not hired and denied promotion was .455.

Figure 17 below illustrates the percentage of respondents who reported experiencing employment discrimination.

Figure 17: Respondents' Experiences of Employment Discrimination



Employment Discrimination and Demographic Variables

In Table 15, we examine the relationship between demographic variables and the experiences of employment discrimination.

Table 15: Employment Discrimination and Demographic Variables

	N	Unfairly fired % (95%CI)	Unfairly not hired % (95%CI)	Unfairly denied promotion % (95%CI)
Overall	1,688	15 (13-17)	25 (23-28)	23 (21-26)
Gender				
Male	296	18 (13-22)	27 (22-33)	33 (27-38)*
Female	1,384	14 (12-16)	25 (23-27)	22 (19-24)
Nonbinary	17	35 (10-61)	31 (6-57)	18 (-3-38)
Visible minority				
Visible minority	359	14 (10-18)	29 (24-34)	25 (21-30)
Non-visible minority	1,329	15 (13-17)	25 (23-27)	23 (21-25)
Immigrant status				
Non-immigrant	1,484	15 (13-17)	25 (23-27)	23 (21-25)
Immigrant	222	14 (9-19)	30 (24-37)	24 (22-26)
Disability status				
Has disability	325	24 (19-28)*	35 (30-40)*	32 (27-38)*
No disability	1,380	13 (11-15)	23 (21-26)	22 (19-24)

Notes: *Statistically significantly higher than comparison groups in category (at p<.01).

We find that visible minority status and immigration status are not directly related to employment discrimination. However, males report being unfairly denied promotion more frequently than females or nonbinary individuals (33% compared to 22% and 18%, respectively), and people with disabilities are more likely to report every kind of employment discrimination compared to non-disabled people. A full 24% of those with disabilities report being unfairly fired (well above the overall average of 15%), 35% report being unfairly not hired (10% above the average of 25%), and 32% report being unfairly denied promotion.

We next examined the effect of other demographic variables on employment discrimination. Age was positively correlated with being unfairly fired (corr. .060, p <.05) and being unfairly denied promotion (corr. .107, p <.001). The length of time in the profession was positively correlated with being denied promotion (corr. .073, p <.01). Education was negatively correlated with being denied promotion (corr. -.054, p<.05).

Table 16 below contains results from the logistic regression equation predicting any experience of employment discrimination (being unfairly fired, not hired, or not promoted) using all the demographic variables in one model.

Table 16: Logistic Regression of Any Employment Discrimination on Demographic Variables

Variable	B (SE)	Sig	Exp(B)
Age	.027 (.008)	<.001	1.101
Length of time in profession	-.017 (.008)	.031	.983
Education	-.123 (.059)	.039	.885
Female	-.327 (.134)	.014	.721
Nonbinary	-.449 (.546)	.411	.638
Visible minority	.096 (.139)	.490	1.101
Non-immigrant	-.165 (.168)	.326	.848
Disability	.702 (.13)	<.001	1.027
(Constant)	-.553 (.399)	.166	.575

Notes: N = 1,324.

Note that age, length of time in profession, education, gender, and disability are all significantly associated with experiencing employment discrimination at p<.05.

When we examine the effect of all of the demographic variables together (age, length of time in the profession, gender, education, visible minority status, immigrant status, and disability status) on the likelihood of experiencing any kind of employment discrimination, we find that age has a positive effect, the length of time in the profession has a negative effect, education has a negative effect, having a disability has a positive effect, and being female compared to male has a negative effect.

These findings suggest that those who are in professions that require higher levels of education are less likely to have experienced employment discrimination, as are those who have been in their profession for longer. Older individuals are more likely to have experienced employment discrimination. Although this data shows that women are less likely to have experienced employment discrimination than men, several women recounted what they perceived to be experiences of employment discrimination in the qualitative survey responses.

Older individuals are more likely to have experienced employment discrimination.

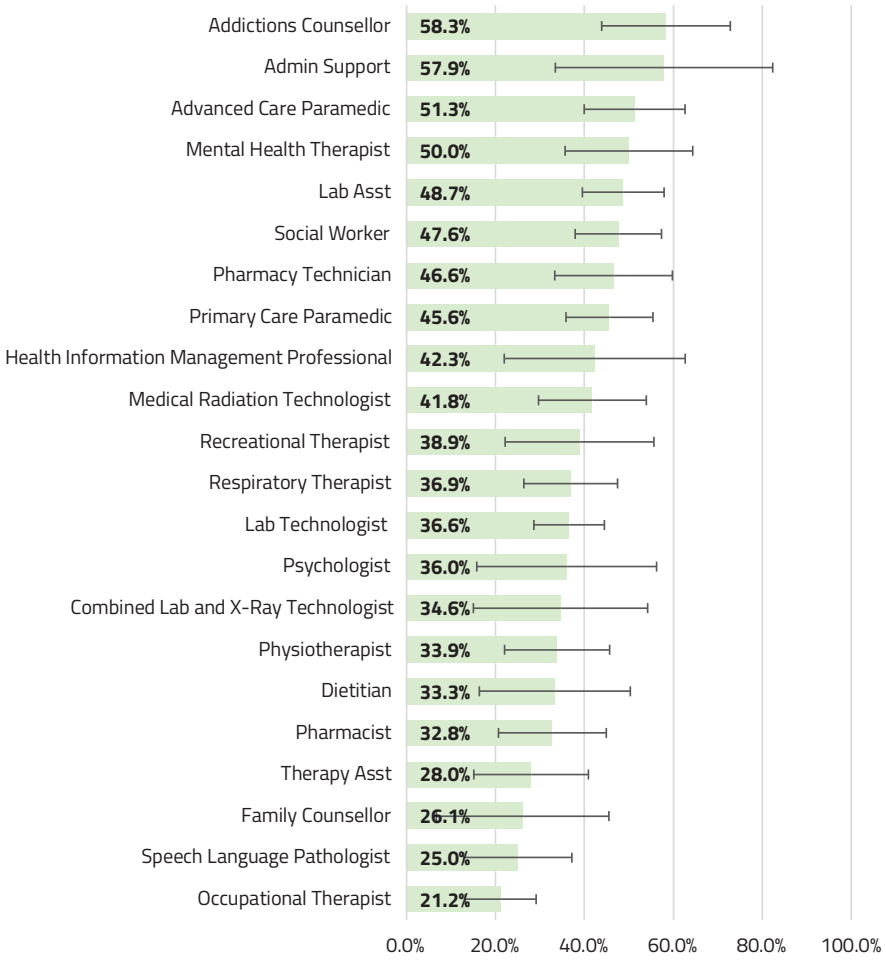
> *"AHS is not accommodating to working moms which a lot of the staff. No flexibility for no good reason. I was pressured by an employer to take a shorter maternity leave so that I could get a job. Also, the majority of my managers are male, even though I have barely any male colleagues."* (Survey respondent)

"As a female in a female-dominated career, I often find myself overlooked and passed over for male colleagues. There is also a level of female-to-female misogyny that exists within health care — working front line, it feels very apparent day to day." (Survey respondent)

Employment Discrimination and Professions

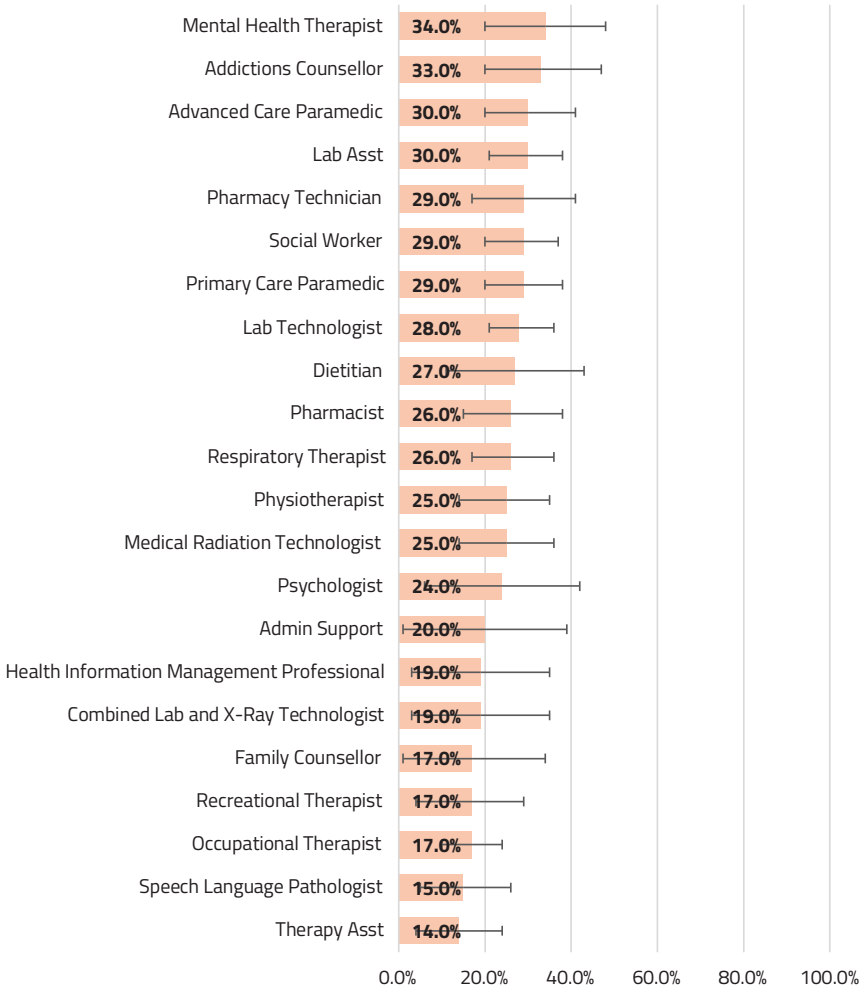
Next, we examine experiences of employment discrimination by profession. Figure 18 shows the percentage of respondents in each job title who report experiencing any form of employment discrimination. Figures 19-21 show the percentage of respondents in each job title who report being unfairly not hired, unfairly denied promotion, and unfairly fired, respectively. We organize the figures by placing the professions that report the highest levels of discrimination on top and the professions that report the lowest levels of discrimination at the bottom.

Figure 18: Job Title and Experiences of Employment Discrimination



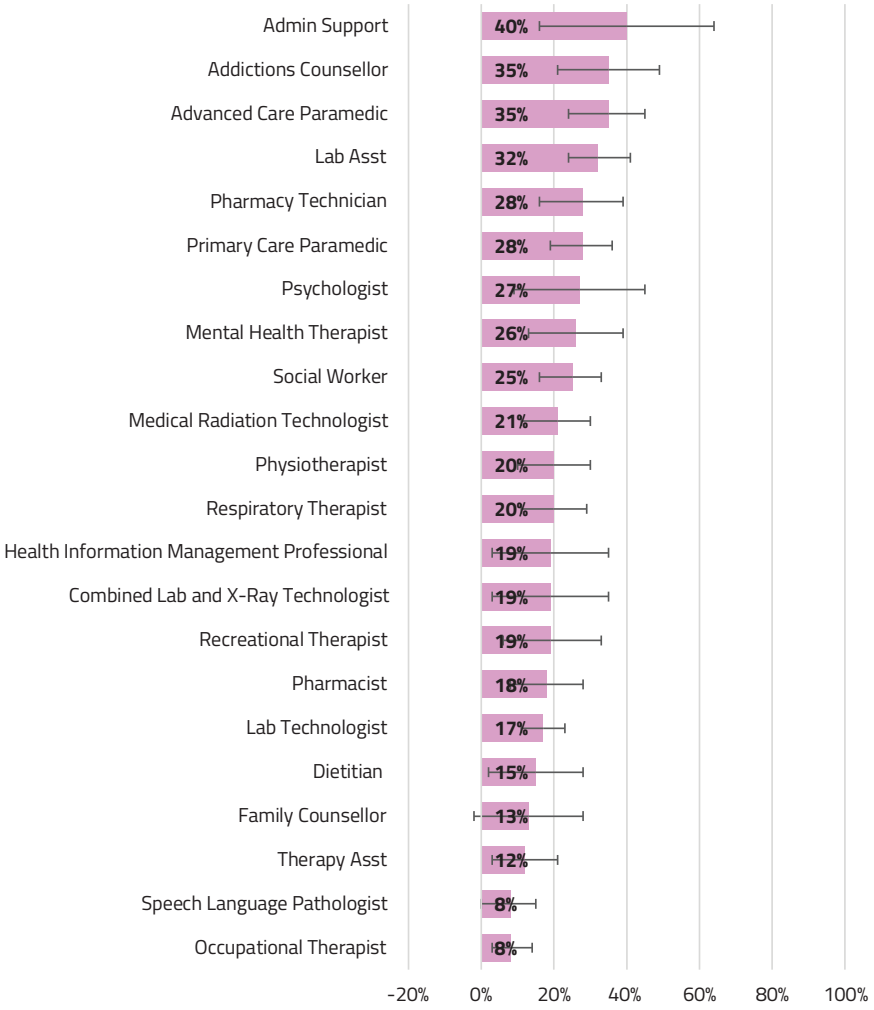
Notes: Survey data. N = 1,665. Mean and 95% CI shown.

Figure 19: Job Title and Unfairly Not Hired



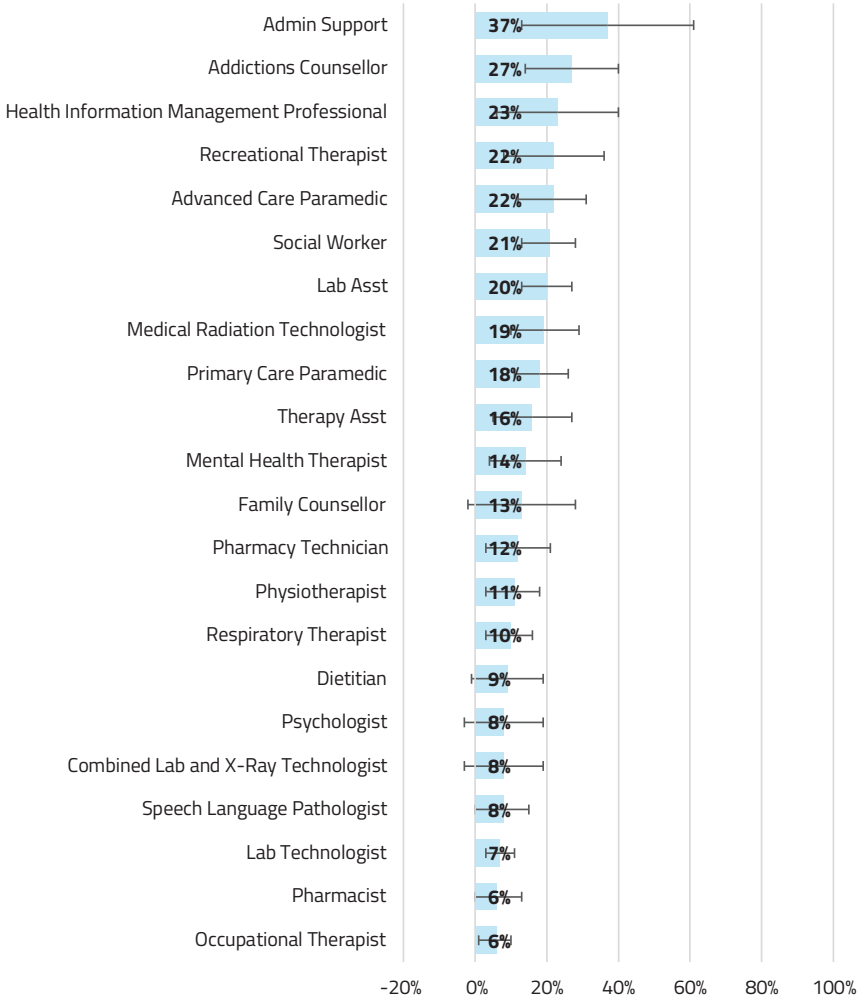
Notes: Survey data. N = 1,665. Mean and 95% CI shown.

Figure 20: Job Title and Unfairly Denied Promotion



Notes: Survey data. N = 1,665. Mean and 95% CI shown.

Figure 21: Job Title and Unfairly Fired



Notes: Survey data. N = 1,665. Mean and 95% CI shown.

Although many of the confidence intervals overlap on these figures, it is clear that several professions repeatedly report experiencing employment discrimination at high rates. Addictions counsellors, administrative support workers, advanced care paramedics, and lab assistants all report experiencing high levels of unfair hiring, promotion, and firing practices. Below we include representative quotes from survey respondents who are in these professions.

Administrative Support Workers

"Administration staff need to be reassessed for reclassification due to the restructuring of APL (Alberta Precision Laboratories)."
(Survey respondent)

"Administration staff are always overlooked! We are expected to do higher workloads and take on more responsibility compared to other staff members in similar situations! Examples are schedulers and medical transcriptionists. This is very unfair!!"
(Survey respondent)

"Administrative positions are swept under the rug. We have an admin support 5 doing data entry while lower admin supports are doing high-level operational work and drowning in work. It's not fair!"
(Survey respondent)

Advanced Care Paramedics

"As paramedics, being lumped in with all other allied health, we are not able to make advancements in pay. We are now the lowest paid in the country." (Survey respondent)

"Advanced care paramedics are in high demand with a very unique role within health care and emergency services cultures — yet we are poorly compensated and as a result struggling with retention and recruitment of the 'best'. We are the most independent practitioners within allied health, yet one of the least paid compared to similarly trained or educated roles within HSAA or other emergency responders such as police and fire. Senior, experienced ACPs need to be compensated for their experience and retain them to mentor the next generation of health-care professionals in EMS." (Survey respondent)

Lab Assistants

"Laboratory workers are underpaid and underappreciated. Nurses get all the attention and wage increases they want. We get peanuts and have to beg for increase in wage. We get expired work contracts."
(Survey respondent)

"Laboratory services make up 4% of the overall health-care budget, and yet the UCP treats us like we are the reason Alberta can't have nice things. When I say I have been disrespected at work, it is by top management and the current Alberta government."
(Survey respondent)

> "Laboratory workers are underpaid and underappreciated."
>
> (Survey respondent)

Reasons for Employment Discrimination

Respondents who felt they had faced employment discrimination (either unfairly fired, unfairly not hired, or unfairly denied promotion) were then asked what they thought the reasons were for that discrimination. We included a list of reasons in the survey (see Appendix A). We also allowed respondents to write in additional reasons that we may not have captured. Respondents were allowed to select as many reasons as they wished. We present the reasons for employment discrimination in Table 17 below. We only list reasons that were checked off or written in by at least 10 respondents.

Table 17: Reasons for Employment Discrimination

Employment discrimination reason	Number	Percent (684)
Sex	181	27
Age	166	24
Social class (education or income)	129	19
Race	98	14
Nepotism/favoritism	82	12
Ancestry/national origins	62	9
Bad management	57	8
Gender	49	7
Shade of skin	45	7
Weight	43	6
Other physical characteristics	43	6
Coworkers' disagreements	40	6
Disability	31	5
Sexual orientation	28	4
Personality	25	4
Pregnancy	21	3
Religion	20	3
Hierarchy/seniority	19	3
Height	18	3
Neurodiversity	10	1

Notes: Reasons in italics were written in by respondents. Respondents were allowed to choose more than one reason, so total does not sum to 100.

Once again, we see that sex, age, social class, and race are the most commonly listed reasons for employment discrimination. This matches the findings for everyday discrimination. The two most commonly listed organizational reasons (which were written in by respondents) were nepotism/favouritism and bad management. Below we include some quotes from survey respondents regarding reasons for employment discrimination

Age

Both younger and older respondents reported experiencing age-related employment discrimination.

> *"I would say I have experienced age discrimination... like, because I'm young. They had a job opening recently, which I did apply for, but it was given to somebody with a lot more years of experience than I have, but somebody who, like, somebody who... personally, I don't feel deserved the job, but it was given. And then when I asked management why I wasn't even given an interview, they said they, like, we're only looking at people with 10 years experience and it wasn't in the job description when they wrote it out there that they wanted 10 years.*
> (Interviewee — early 30s)

> *"It's really hard to have any upward movement. Everything's based on seniority. So even if you're really good at your job, just because you're young, you don't get rewarded."* (Interviewee — late 20s)

> *"They're giving more chances for the younger staff to advance a little bit. So I kind of feel age-discriminated a little bit. Just, if there's a project to do, it's usually one of two or three younger people that will be offered the opportunity. So right now, I feel like there's no room for advancement."* (Interviewee — mid 40s)

> *"Oh, yeah. Oh, well, 'we won't put her on working up the new instrument. She's too old. She'll retire'. And the machines are retiring before me. So, I've had age discrimination because of my age, indirectly through others. They said, 'oh, no, we won't put her on them because she's too old'. I hear from coworkers who say, yeah, well, I got picked because you're too old sort of thing."* (Interviewee — over 60)

> *"There was a time a few years ago when I had not struggled a bit with a job, but I was having some issues with the job. And one of the managers who is, he's since retired, but he basically told me I was too old to do the job. And he said, you know, that's I think you need to think of something else… think of retiring… Because, you know, have you ever thought you're just too old to do this job? And I said, no, I was not too old to do this job, that I can do everything everybody else can. And I have a lot of life experience, which is very important in this job too. And I think because once you're labelled as older… it stops. Opportunities stop."* (Interviewee — early 50s)

Sex

Some female employees reported facing employment discrimination because of their sex.

> *"I think there's been times when I felt that I was being held back, or I had to work harder than my male counterparts. I had hoped to be considered for the (leadership) position, especially since I was the only person there with experience in education. Instead, they decided to give the role to one of the former residents who had no qualifications or experience relevant to the role. It didn't make sense to me. His background was not in the human service field. I couldn't help but feel that their decision might have been influenced by the fact that he's a man.'* (Interviewee)

Race

Several survey respondents reported experiencing racial employment discrimination.

> *"Despite AHS's claims of diversity, discrimination is rampant for health-care workers. I have personally been denied several job opportunities in favour of white male colleagues who have zero relevant experience. I have also had a much more difficult time even getting interviews for jobs I apply for compared to my peers with the same qualifications who have 'white' names."* (Survey respondent)

> *"There is enormous racial discrimination at work as well as bullying, threatening, and harassment from managers. Our concerns are not heard. Our requests for an exit interview with HR fall on deaf ears. There are no exit interviews at all. It's like everybody is aware that threatening/bullying/harassment/micromanagement is occurring at work, but they all choose to close their eyes."* (Survey respondent)

"Despite AHS's claims of diversity, discrimination is rampant for health-care workers."

(Survey respondent)

Disability

Employees reported employment discrimination due to disability.

> *"I have, like, had post-concussion syndrome and stuff too, and I had been told that one of my newer managers found out that I actually had it get used against me where, oh, well, 'you can't, we didn't consider you for this role because we thought that your concussion syndrome would have woven too much'. When I came with kind of a doctor's note in hand to say, I actually qualify for this job"* (Interviewee)

Intersectional Discrimination

Both survey respondents and interviewees noted experiences of intersectional discrimination, where they felt they had been discriminated against at work due to intersecting identities.

> *"I am devalued as a worker because of my age and sex. I have been passed over for more interesting work in the lab to give way to young male counterparts."* (Survey respondent)

> *"As an allied health worker in Alberta, I've seen firsthand some of the inequities in our health-care system. Gender, race, and my role itself have often impacted my pay, workload, and opportunities. It's clear to me that certain groups face heavier burdens than others."*
> (Survey respondent)

> *"I have felt that throughout sort of life, uh, since understanding that I'm an Indigenous person and seeking a career was difficult while also being diversely abled… In some professional settings, I have encountered stereotypes, microaggressions or the lack of understanding of Two-Spirit and queer identity and understanding the Cree gender teachings and as an equal being right and, um… So I think working in those environments is more challenging, I guess, as I've had to advocate not only for myself but also for better quality and inclusivity."*
> (Interviewee)

Summary – Discrimination

Allied health-care workers in Alberta report very high rates of everyday discrimination at work and employment discrimination. Over 80% report experiencing everyday discrimination at work at least a few times a year, with 52% reporting monthly, 32% reporting weekly, and 15% reporting daily experiences of discrimination on the job. These numbers are extremely high, and much higher than the 9% level reported by all Canadian workers (Nangia & Arora, 2021); they speak to the poor treatment of these workers within the health-care system, both by patients and by those 'above' them in the medical workforce hierarchy (doctors and nurses).

Individuals with higher levels of education report less everyday discrimination, but those who identify as having a disability report markedly higher levels. Professions that report the highest frequency of everyday discrimination include paramedics, administrative support staff, lab assistants, and pharmacy and medical radiation technicians. Addictions counsellors, therapy assistants, and social workers also report frequent everyday discrimination at work. Interestingly, these are the professions that deal most directly with patients, and who might be most likely to deal with patients with acute illness and/or mental health issues. Remarkably, 13% of respondents say that everyday discrimination is 'just part of the job.'

Professions that report the highest levels of employment discrimination include addictions counsellors, administrative support workers, advanced care paramedics, and lab assistants.

Employment discrimination (experiences of being unfairly not hired, not promoted, or fired) is reported by 40% of respondents. Individuals with higher levels of education report less employment discrimination, but older individuals and those who identify as having a disability report higher levels. Professions that report the highest levels of employment discrimination include addictions counsellors, administrative support workers, advanced care paramedics, and lab assistants.

The most common reasons for everyday and employment discrimination include age, sex, social class, and race. Previous studies have examined experiences of racism among occupational therapists (Beagan et al., 2022) and physiotherapists (Vazir et al., 2019). These studies illustrate that racism as experienced by these professionals is both interpersonal and structural. Similarly, research shows that gender discrimination experienced by female health-care workers during COVID-19 was both structural and interpersonal (Hennein et al., 2023). As we consider the implications of our findings with Alberta allied health-care workers, we must be alert to the structural factors that contribute to this unsafe work environment.

At the organizational level, respondents blame nepotism, favouritism, and bad management for experiences of employment discrimination. Previous research has shown that workplace discrimination is associated with career dissatisfaction and turnover for health-care workers (Hennein et al., 2023; Nunez-Smith et al., 2009). We turn to these topics in the next section.

7. JOB-RELATED STRESS AND LIKELIHOOD OF LEAVING

This section summarizes our findings related to our third major research question: *What are the levels of job-related stress among allied health-care workers in Alberta? Are workers planning to leave their jobs? Do job stress, burnout, and likelihood of leaving vary by demographic characteristics or profession?*

Job-Related Stress

Many tools have been developed to measure job-related stress and burnout in the workplace (Edu-Valsania et al., 2022). Some of these tools apply to all workplaces and some are specific to certain professions. For our survey, we adapted three questions that are common to many of these tools. To assess levels of job-related stress and burnout among allied health-care workers, we asked survey respondents to rate their agreement with the following three questions:

My job is emotionally draining.
My job is very stressful.
I am overwhelmed by the demands of my job.

Respondents could choose from the following answers: *Strongly agree; Agree; Neither agree nor disagree; Somewhat disagree; Strongly disagree*.

The following figures (22-24) show the overall distribution of responses to these three questions.

Figure 22: Distribution of Responses to "My job is emotionally draining."

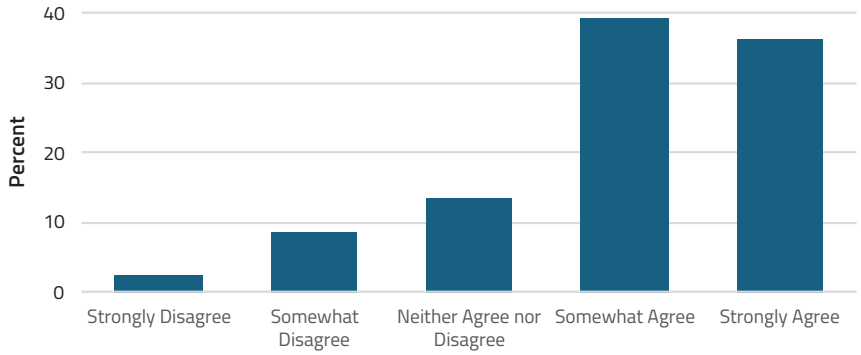


Figure 23: Distribution of Responses to "My job is very stressful."

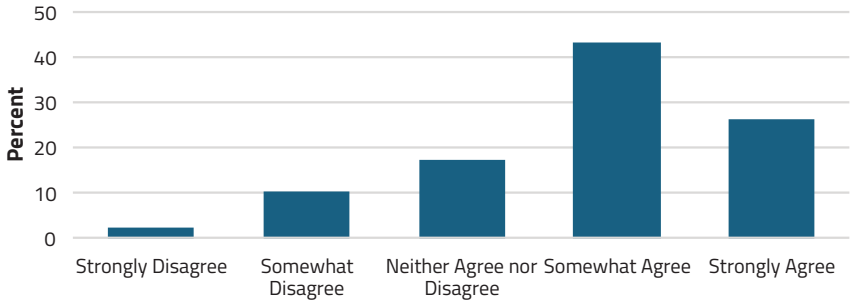
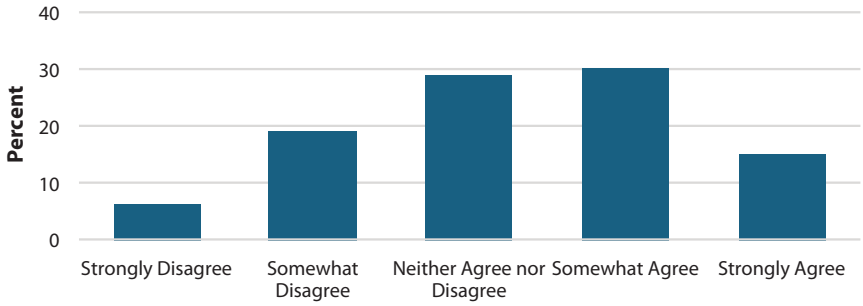


Figure 24: Distribution of Responses to "I am overwhelmed by the demands of my job."



These figures illustrate that allied health-care workers in Alberta are under a lot of strain at work. Just under 70% of respondents report that their job is very stressful, 75% report that their job is emotionally draining, and 45% report feeling overwhelmed by the demands of their job. These numbers are very high and indicate a heavy emotional burden.

The following quotes come from the qualitative survey data.

> *"We are crashing. We are so tired and burnt out, yet management ignores this, continues to try and create division amongst the staff. We are terrified of losing our jobs and our health. There are many colleagues that state our clients have better mental health than the clinicians have right now."* (Survey respondent)

> *"Burnout is high, people are tired."* (Survey respondent)

> *"Burnout is high. Recognition for hard work is low. I put in a lot of effort and work, and it is not recognized."* (Survey respondent)

"Burnout is real. Unsure of long-term sustainability. Caseload is too much." (Survey respondent)

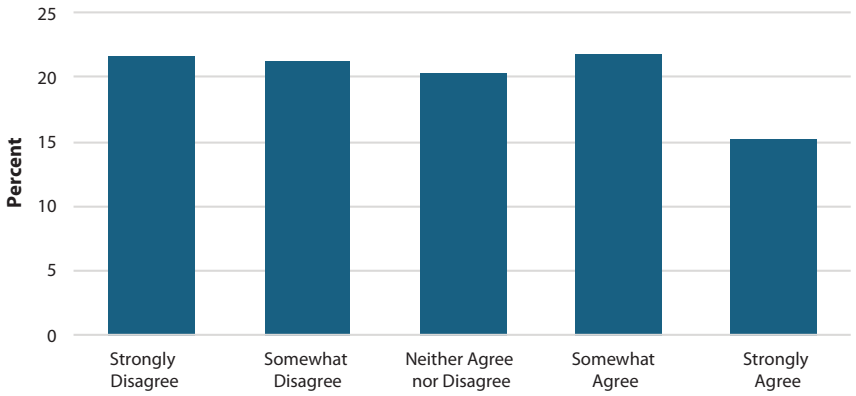
"I have never in my life felt more unappreciated than I do working in health care, and I used to work in fast food." (Survey respondent)

Intentions to Leave

There have been many studies on nurses' and doctors' intentions to leave their professions (Li, Galatsch et al., 2013), all of which use simplistic one-item measures to assess intention to leave. We borrowed measures from these studies when designing our survey. To assess whether respondents were likely to leave their job, we presented respondents with two prompts:

1. *I often think about quitting my job.* Respondents were asked to rate their level of agreement with this statement on the following scale: *Strongly agree; Agree; Neither agree nor disagree; Somewhat disagree; Strongly disagree.*
2. *On a scale from 0 to 10, where 0 means "very unlikely" and 10 means "very likely," how likely is it that you will look for a job outside of the organization where you currently work during the next year?*

Figure 25: Distribution of Responses to "I often think about quitting my job."



A full 37% of respondents agree or strongly agree that they often think about quitting their job.

While 40% of respondents said that they disagreed with the statement, a full 37% of respondents agree or strongly agree that they often think about quitting their job.

One survey respondent left the following comment:

> *"Health care is not funded appropriately, with most of my coworkers either thinking of quitting or having already quit. We are paid the same as Sysco warehouse workers ($44/hr)."* (Survey respondent)

When asked about how likely they were to look for a job outside their organization during the next year on a scale from 0 (very unlikely) to 10 (very likely), the average response was 4.15, with a standard deviation of 3.63.

Figure 26: Distribution of "Likelihood I will look for a job outside my organization during the next year."

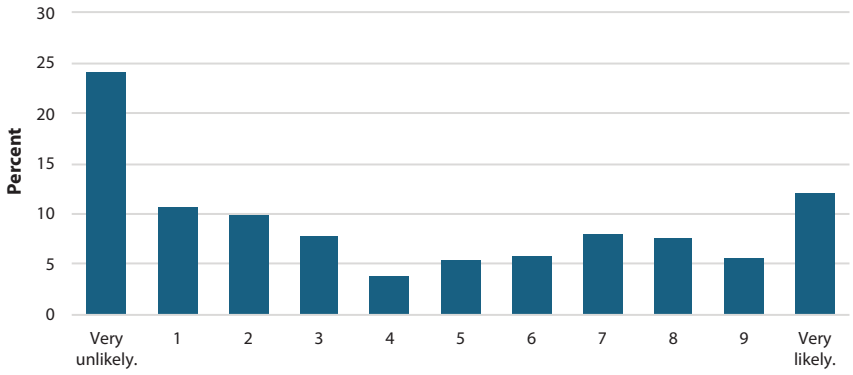


Figure 26 illustrates that just under 25% of respondents say they are very unlikely to look for a job outside their organization in the next year. Approximately half that number, 12%, say that they are very likely to look for a job outside their organization in the next year.

Job Stress and Demographics

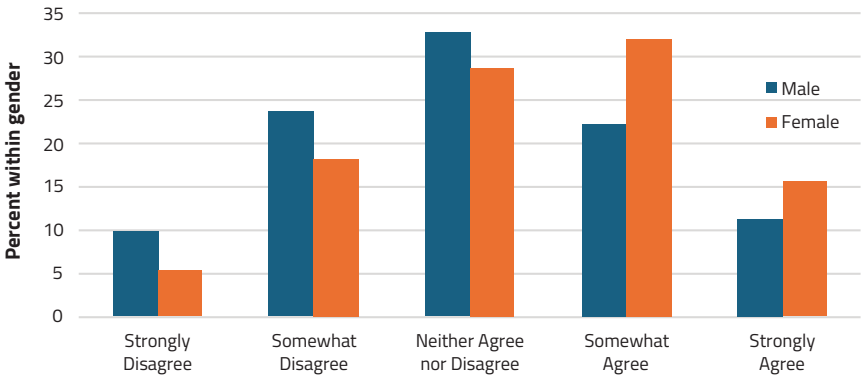
Here we examine demographic differences in the variables related to job stress and intentions to leave. We explore the effects of gender, visible minority status, immigration status, disability status, age, education, and length of time in the profession on each job stress variable (emotionally draining, very stressful, overwhelmed by demands), independently and together. Next, we will highlight statistically significant differences between groups.

In bivariate tests, we found that immigration status has no effect on the job stress variables. Visible minority status has no effect on any of the job stress variables. Age and length of time in the profession are not related to the job stress variables.

We found that education is positively related to "overwhelmed by the demands of my job" (corr. .051, p<.05). This finding suggests that allied health-care workers in jobs that require higher levels of education are more likely to report feeling overwhelmed by the demands of their jobs than those in jobs requiring lower levels of education.

The only job stress variable that shows differences across gender is also the 'overwhelmed by the demands of my job' variable. Figure 27 below illustrates that women are more likely to report being overwhelmed than men by the demands of their job.

Figure 27: Gender Differences in Responses to "I am overwhelmed by the demands of my job."



Disability status has an effect on all three measures of job stress. Those who identify as disabled report higher levels on all stress measures than those who do not. Figures 28–30 illustrate the distribution of the job stress variables by disability status.

Figure 28: Distribution of Responses to "My job is emotionally draining" by Disability Status

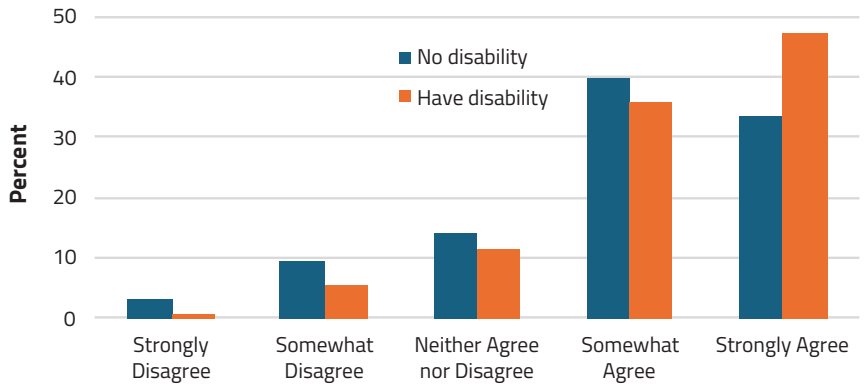


Figure 29: Distribution of Responses to "My job is very stressful" by Disability Status

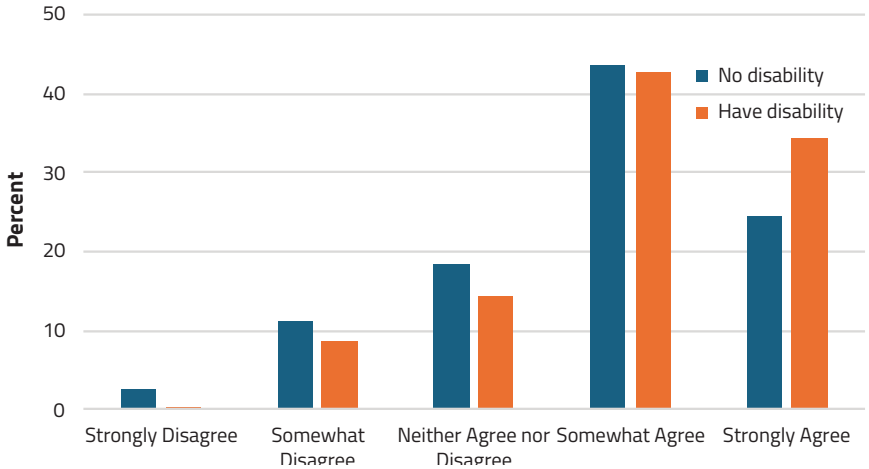
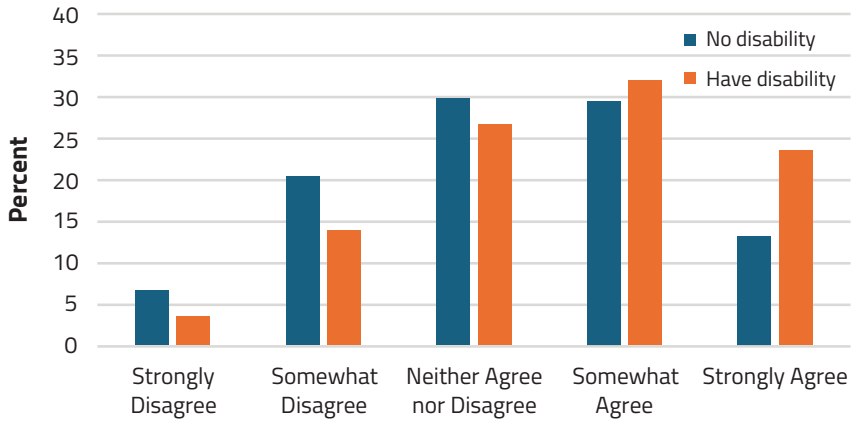


Figure 30: Distribution of Responses to "I am overwhelmed by the demands of my job" by Disability Status



It is easy to see from Figures 28-30 that disability status has a huge impact on the amount of stress faced at work.

Next, we examined the effects of all of the demographic variables together on the three job stress variables. In these models, we treat the dependent variables as continuous variables with 1 = strongly disagree and 5 = strongly agree. Tables 18-20 show the results of these linear regression models.

Table 18: Regression of "My job is emotionally draining" on Demographic Variables

	Unstd. coeff.		Std. coeff.	T	Sig.
	B	Std. error	Beta		
Age	-.004	.004	-.043	-1.093	.274
Length of time in profession	.002	.004	.019	.473	.636
Education — Highest level	.007	.029	.006	.243	.808
Visible minority	-.145	.068	-.057	-2.131	.033
Female*	.103	.066	.039	1.559	.119
Nonbinary*	-.084	.258	-.008	-.326	.745
Non-immigrant	.142	.082	.047	1.734	.083
Have disability	.339	.064	.129	5.277	<.001
(Constant)	3.859	.194		19.851	<.001
Adjusted Rsq	.024				

Notes: *Reference: male. Education entered as a continuous variable. Survey data. N = 1,693.

Note that visible minority status and having a disability are significantly related to "my job is emotionally draining" at p<.05. Those who identify as a visible minority report lower levels on this variable, while those who identify as having a disability report higher levels.

Table 19: Regression of "My job is very stressful" on Demographic Variables

	Unstd. coeff.		Std. coeff.	T	Sig.
	B	Std. error	Beta		
Age	.000	.004	-.002	-.050	.960
Length of time in profession	.004	.004	.039	.975	.330
Education — Highest level	-.041	.028	-.036	-1.448	.148
Visible minority	-.041	.067	-.017	-.619	.536
Female*	.026	.065	.010	.407	.684
Nonbinary*	.021	.255	.002	.084	.933
Non-immigrant	.070	.081	.023	.863	.388
Have disability	.269	.064	.104	4.226	<.001
(Constant)	3.782	.192		19.710	<.001
Adjusted Rsq	.011				

Notes: *Reference: male. Education entered as a continuous variable. Survey data. N = 1,699.

Note that having a disability is significantly related to "my job is very stressful" at p<.001. Those who identify as having a disability report higher levels of stress than those who do not have a disability.

Table 20: Regression of "I am overwhelmed by the demands of my job" on Demographic Variables

	Unstd. coeff.		Std. coeff.	T	Sig.
	B	Std. error	Beta		
Age	.000	.004	.004	.104	.918
Length of time in profession	.002	.004	.022	.560	.575
Education — Highest level	.057	.031	.044	1.813	.070
Visible minority	-.021	.074	-.008	-.284	.777
Female*	.316	.072	.109	4.406	<.001
Nonbinary*	.337	.282	.030	1.198	.231
Non-immigrant	-.130	.089	-.039	-1.457	.145
Have disability	.353	.070	.123	5.030	<.001
(Constant)	2.803	.212		13.247	<.001
Adjusted Rsq	.027				

Notes: *Reference: male. Education entered as a continuous variable. Survey data. N = 1,702.

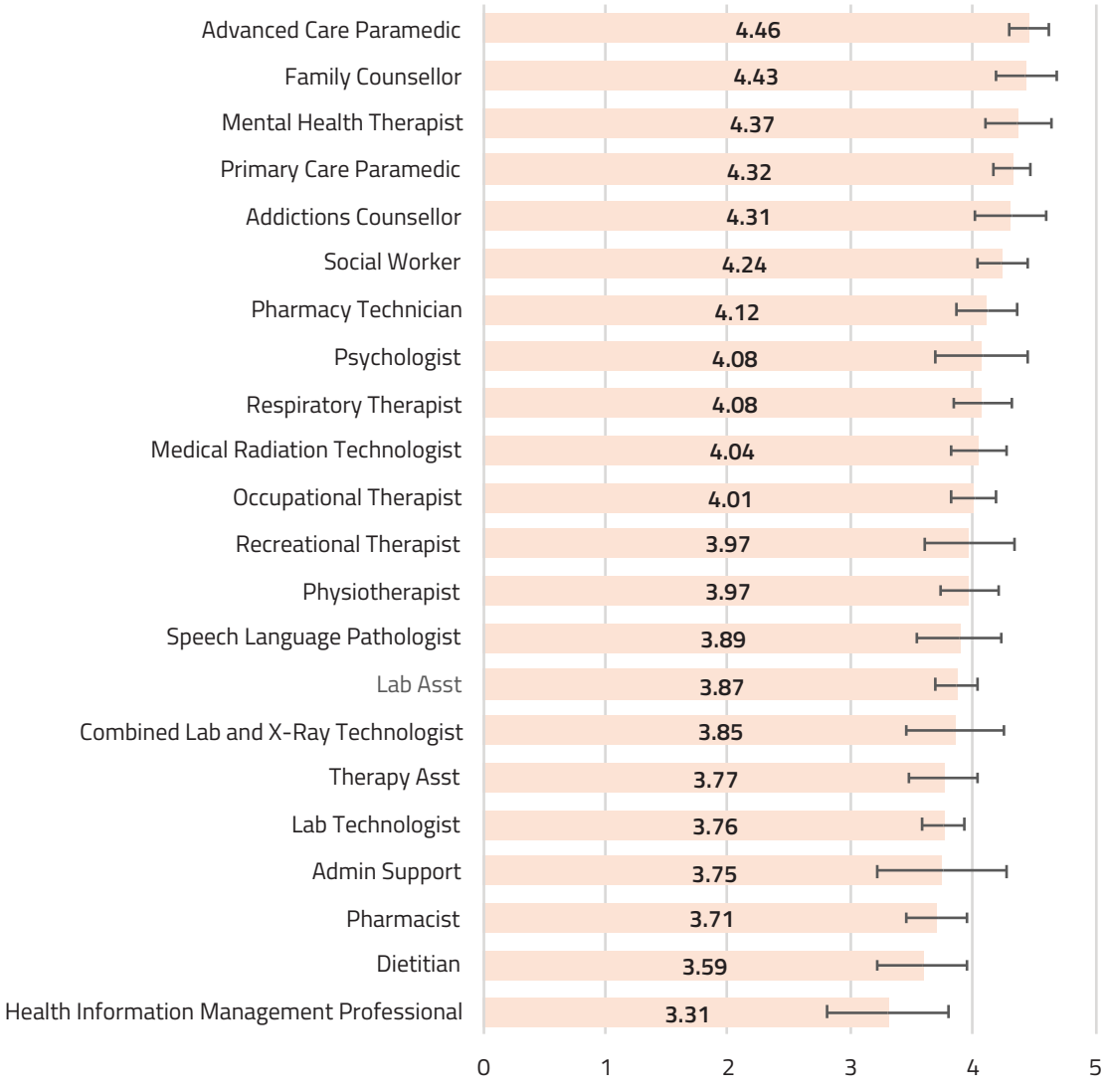
Note that gender and having a disability are significantly related to "I am overwhelmed by the demands of my job" at p<.001. Women are more likely than men to report being overwhelmed, and those who identify as having a disability are more likely to report being overwhelmed than those who do not.

Examining Tables 18-20 together, we find that once we control for other individual-level variables, the only variable that is consistently related to the job stress variables is disability status. Those who identify as having a disability report higher levels of job stress on all measures. Women report higher levels of being overwhelmed by the demands of their job than men, controlling for other demographic variables.

Job Stress and Profession

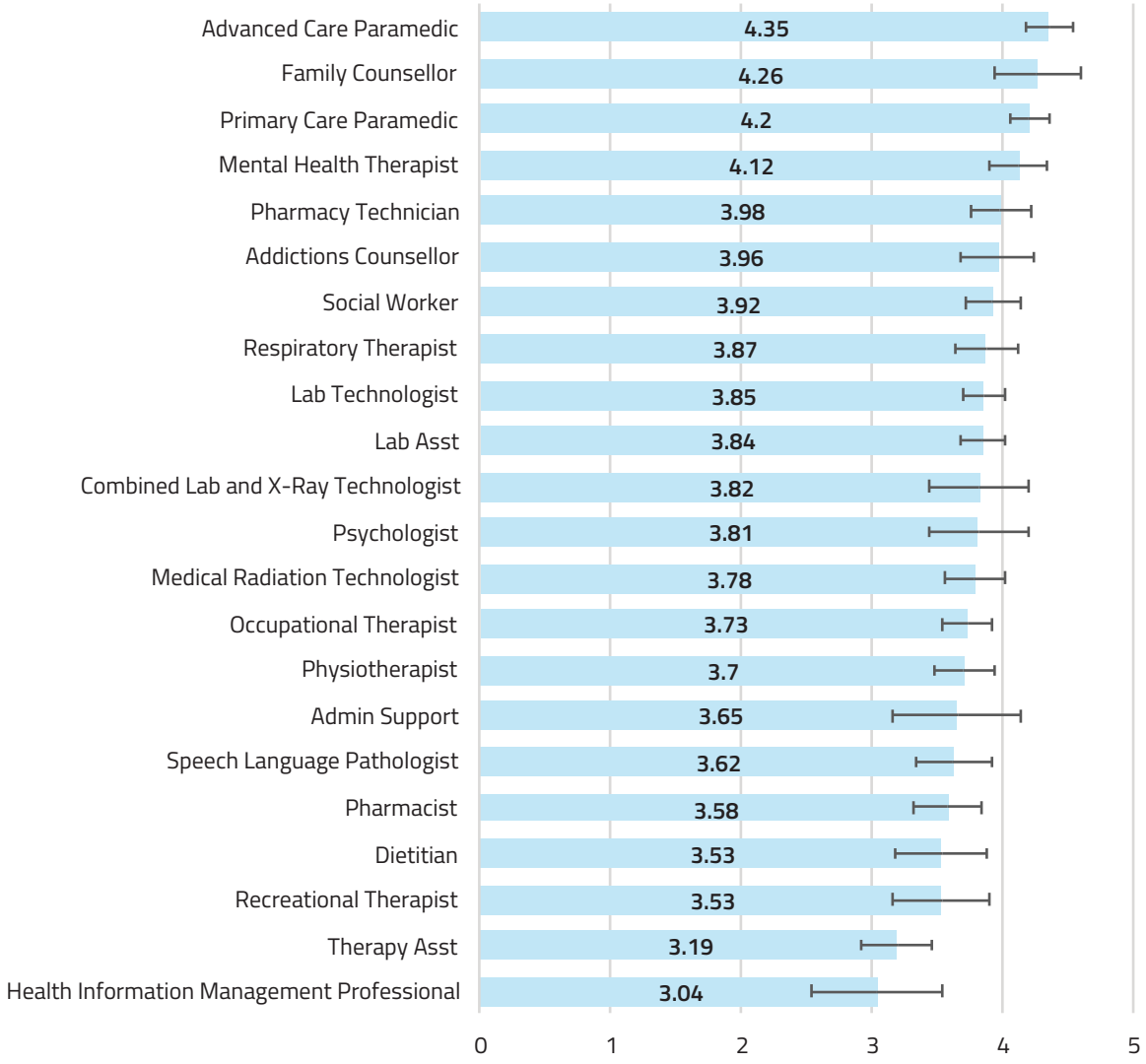
We next examine the relationship between job title and the measures of job stress. Figures 31-33 show the average values of the job stress variables (emotionally draining, very stressful, and overwhelmed by demands) by job title. We rank the job titles in these figures with the highest averages at the top and the lowest at the bottom.

Figure 31: Job Title and "My job is emotionally draining."



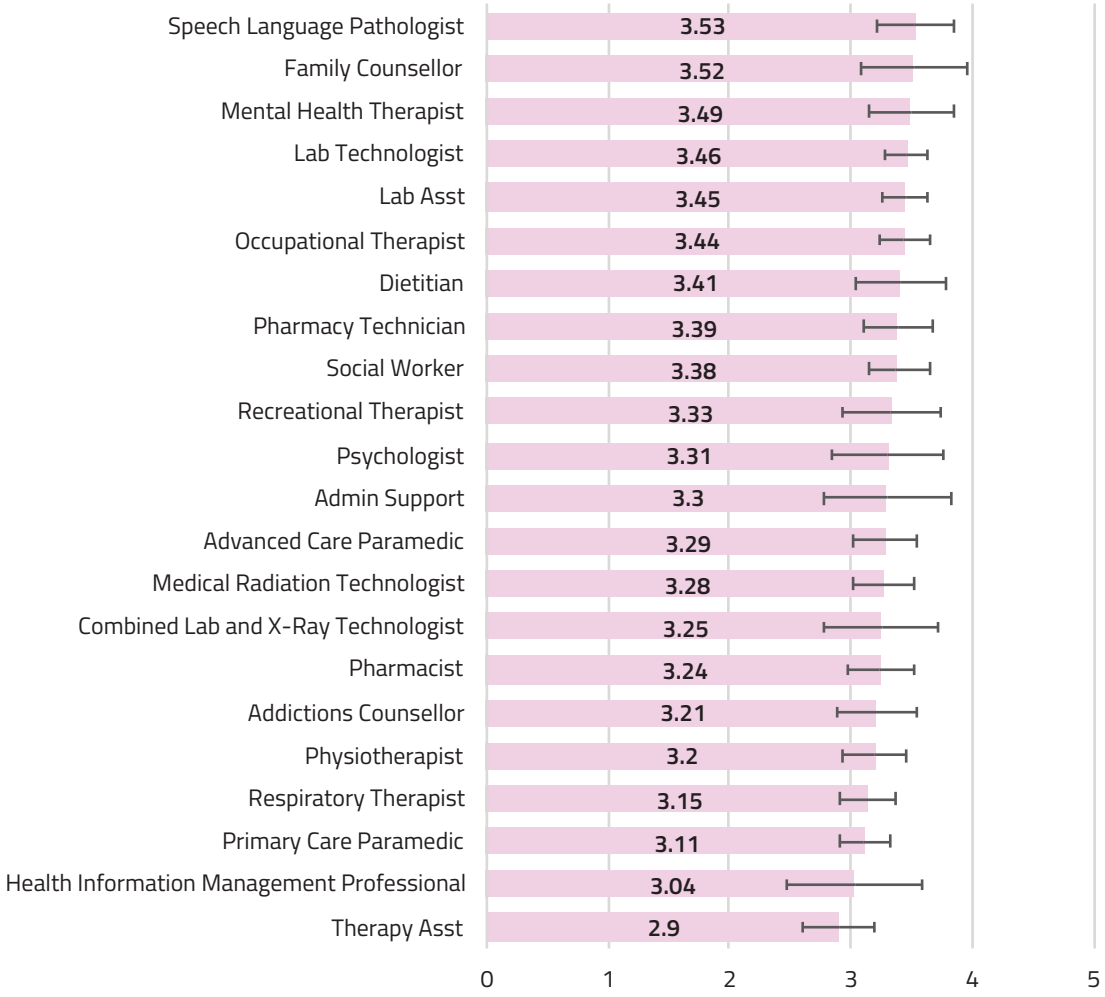
Notes: Responses on 5-point scale from Strongly Disagree = 1 to Strongly Agree = 5. Mean and 95% confidence intervals shown. N = 1,690.

Figure 32: Job Title and "My job is very stressful."



Notes: Responses on 5-point scale from Strongly Disagree = 1 to Strongly Agree = 5. Mean and 95% confidence intervals shown. N = 1,690.

Figure 33: Job Title and "I am overwhelmed by the demands of my job."



Notes: Responses on 5-point scale from Strongly Disagree = 1 to Strongly Agree = 5. Mean and 95% confidence intervals shown. N = 1,690.

Many of the confidence intervals in Figures 31-33 overlap, suggesting that levels of job stress are very similar across the different allied health-care professions. However, there do appear to be some patterns. The professions that report the highest levels of job stress on the first two variables are acute care paramedics, family counsellors, primary care paramedics, mental health therapists, addictions counsellors, social workers, and pharmacy technicians. A slightly different group reports the highest rates of being overwhelmed by the demands of their job. This group includes speech language pathologists, family counsellors, mental health therapists, lab technicians, lab assistants, occupational therapists, and dietitians. Pharmacy technicians and social workers also score high on this variable.

Some quotes from the qualitative survey data and the interview data are included next to illustrate the stress members of different professions feel.

Addictions Counsellor

"It's emotionally exhausting. It's absolutely emotionally exhausting, and the scheduling doesn't help. I'm always trying to catch up on my self-care." (Interviewee)

Social Worker

"We're not a factory, right? We're not a factory; we're not a peaceful factory. It's frustrating. It's hard. It's demoralizing, it's… defeating. It's all the things that are very eroding to a person's burnout… It's a real thing across all professions in health care." (Interviewee)

"Probably the most challenging thing is just the demands, how much work there needs to be done in the day, and there's just never enough time to get it done… There's just so many things you need to get done in the day and so many timelines and deadlines to get done." (Interviewee)

"Social workers are not treated with respect by our direct managers. They are unhelpful, lazy, and disregard what we say. I have a good team, but many of my colleagues do not, and they are absolutely miserable. The culture in health care is now awful, and most people do not want to work here." (Survey respondent)

"Social workers are unsupported by the organization. I received zero orientation, and little meaningful training is available." (Survey respondent)

Paramedics

"Alberta paramedics went from being some of the highest-scoped and highest-paid practitioners in the country to the lowest paid with an even higher scope. More medications and skills are continuously added, with no increase to pay. The number of supervisors has gone up tenfold, with no additional response resources, working the current staff off their feet with no increased compensation. Time off is denied because nobody wants to work, and most days, half of the resources aren't staffed due to book-offs and sickness. Mental health is in a crisis at all time high, and supervisors continually push employees past their breaking point. We are on the verge of collapse, in a 'have' province, and we don't even recognize it." (Survey respondent)

> "The culture in health care is now awful, and most people do not want to work here."
>
> (Survey respondent)

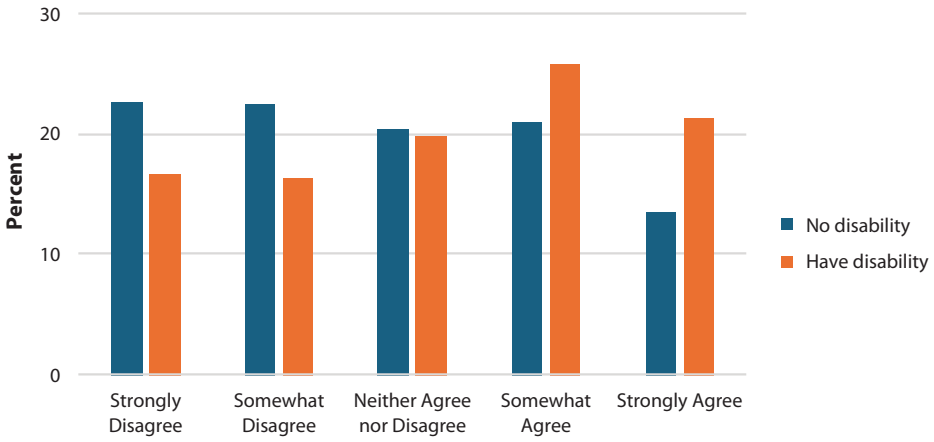
"Paramedics experience challenges disproportionate to other allied health professions, but these challenges are not addressed proportionally to their severity, leading to far worse career longevity, mental, and physical health than other allied health professions."
(Survey respondent)

Intentions to Leave and Demographic Variables

We next examine the relationship between the demographic variables and the variables measuring intention to leave.

There was no bivariate relationship between gender, visible minority status, or immigration status and responses to "I often think about quitting." Both age and length of time at the job were positively correlated with often thinking about quitting, with those who were older and had been in the profession longer more likely to agree that they thought about quitting. Education was negatively associated with thinking about quitting, as those with higher levels of education were less likely to think about quitting. There was a relationship between disability status and thinking about quitting. As shown in Figure 34, those who identify as having a disability are more likely to agree with the statement that they often think about quitting.

Figure 34: Distribution of Responses to "I often think about quitting my job" by Disability Status



The combined effects of all of the demographic variables on the variables "I often think about quitting my job" are shown in Table 21 next.

Table 21: Regression of "I often think about quitting my job" on Demographic Variables

	Unstd. coeff.		Std. coeff.	T	Sig.
	B	Std. error	Beta		
Age	-.004	.005	-.030	-.760	.447
Length of time in profession	.013	.005	.098	2.469	.014
Education — Highest level	-.104	.038	-.067	-2.722	.007
Visible minority	-.048	.090	-.014	-.532	.595
Female*	.035	.088	.010	.405	.686
Nonbinary*	-.157	.344	-.011	-.457	.648
Non-immigrant	-.041	.109	-.010	-.374	.709
Have disability	.395	.086	.113	4.605	<.001
(Constant)	3.164	.258		12.264	<.001
Adjusted Rsq	.020				

Notes: *Reference: male. Education entered as a continuous variable. Survey data. N = 1,702.

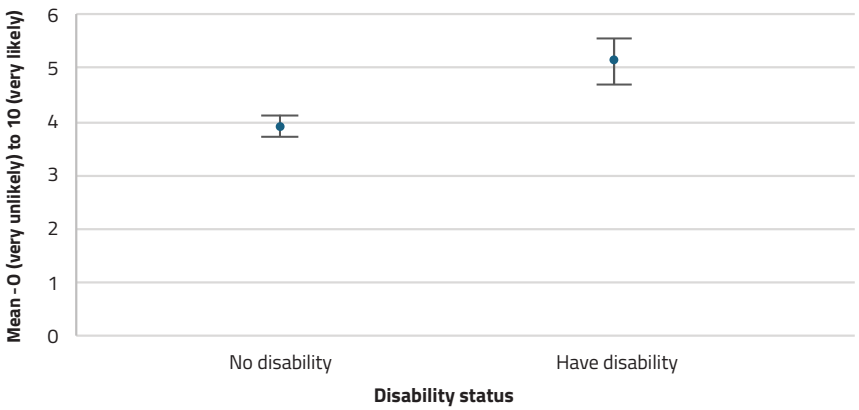
Length of time in the profession, education, and disability status are all significantly related to 'I often think about quitting my job' at p<.05. Those who have been in the profession longer are more likely to think about quitting (possibly related to approaching retirement). Those with more education are less likely to think about quitting their job, and those who identify as having a disability are more likely to think about quitting their job.

There was no significant difference among the genders on the variable "looking for a job outside the organization." Similarly, visible minorities and non-visible minorities, immigrants and non-immigrants had the same average values on this variable.

Both age and length of time in the profession were negatively correlated with looking for a job outside the organization. Education was not statistically related to looking outside the organization for a job.

Those who identified as having a disability had an average of 5.13 (4.7-5.55 95% CI) on this variable, while those without a disability had an average of 3.93 (3.73-4.12 95% CI). This difference is statistically significant, as illustrated in Figure 35 below.

Figure 35: Relationship Between Disability Status and "Looking for a job outside the organization"



The combined effects of all of the demographic variables on the variable "Likelihood of looking for a job outside the organization in the next year" are shown in Table 22 below.

Table 22: Regression of "Likelihood of looking for a job outside the organization in the next year" on Demographic Variables

	Unstd. coeff.		Std. coeff.	T	Sig.
	B	Std. error	Beta		
Age	-.025	.014	-.076	-1.832	.067
Length of time in profession	-.039	.015	-.112	-2.691	.007
Education — Highest level	.118	.105	.029	1.120	.263
Visible minority	-.167	.247	-.019	-.679	.498
Female*	-.344	.242	-.036	-1.420	.156
Nonbinary*	.383	.954	.010	.400	.689
Non-immigrant	-.303	.302	-.028	-1.004	.315
Have disability	1.150	.235	.124	4.894	<.001
(Constant)	5.757	.705		8.162	<.001
Adjusted Rsq	.047				

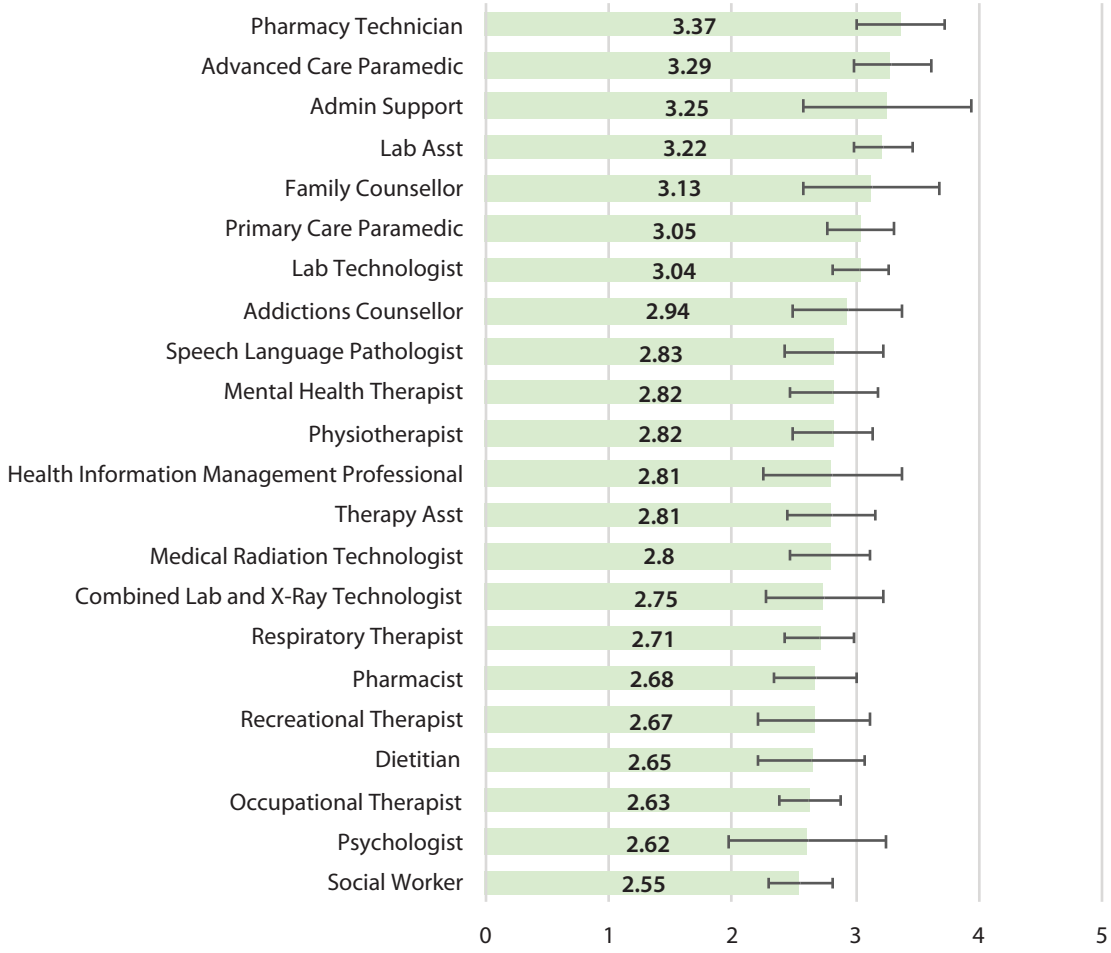
Notes: *Reference: male. Education entered as a continuous variable. Survey data. N = 1,544

The length of time in the profession and disability status are both related to "looking for a job outside the organization," at p<.01. Thus, when we examine the relationship between individual-level demographic variables and intentions to leave, we find that education has a negative effect on thinking about quitting, while time in the profession has a positive effect on thinking about quitting but a negative effect on likelihood of looking for a job outside the organization (another hint that these may be people thinking about retirement). Those who identify as having a disability are more likely both to often think about quitting and to be looking for a job outside the organization within the next year, controlling for other demographic variables.

Intentions to Leave and Professions

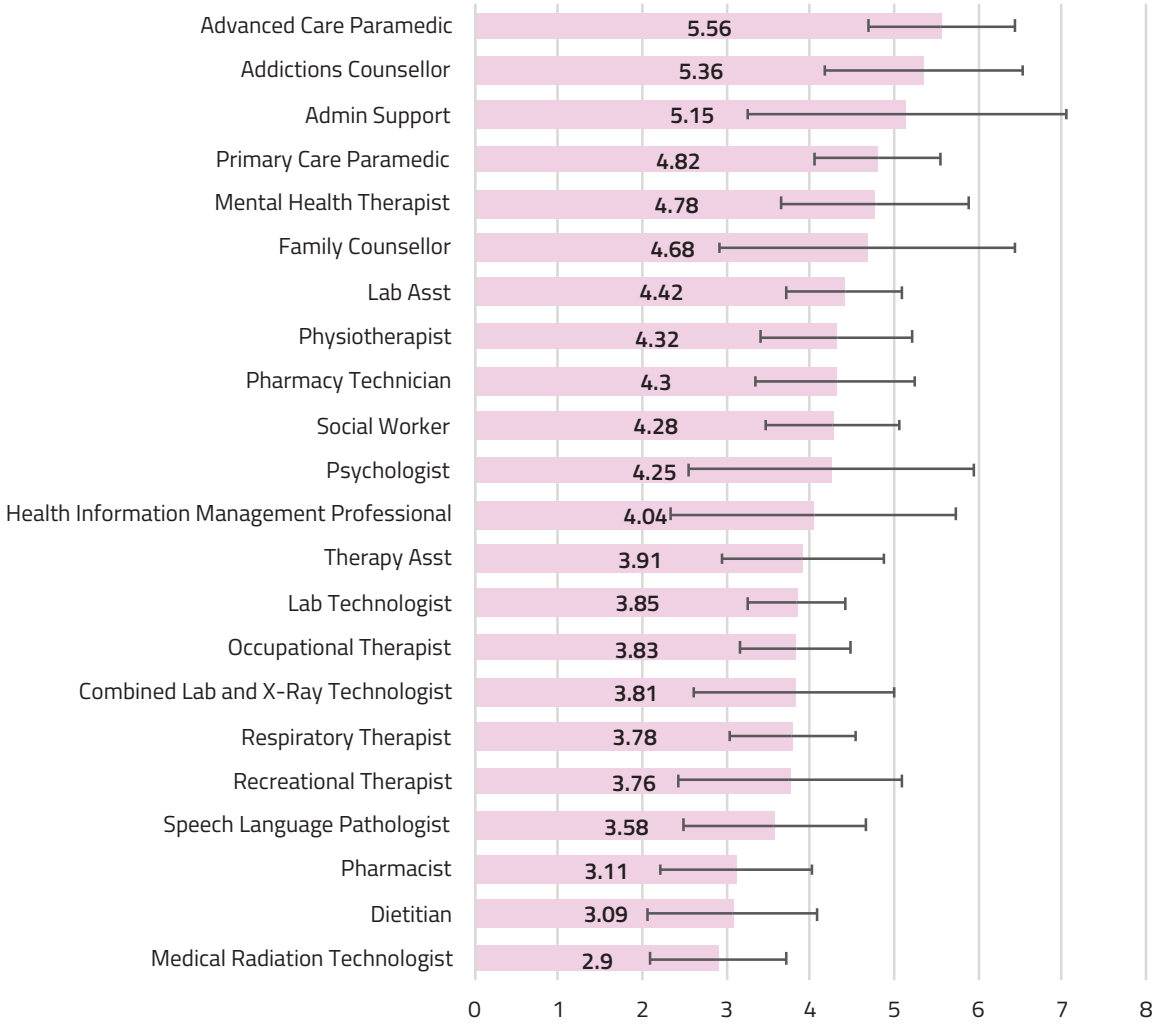
Figures 36 and 37 show the relationship between job titles and intentions to leave.

Figure 36: Job Title and "I often think about quitting my job."



Notes: Responses on 5-point scale from Strongly Disagree = 1 to Strongly Agree = 5. Mean and 95% confidence intervals shown. N = 1,690.

Figure 37: Job Title and Likelihood of "Looking for a job outside the organization."



Notes: Responses on 11-point scale from Not at all likely = 0 to Extremely likely = 10. Mean and 95% confidence intervals shown. N = 1,545.

Most of the confidence intervals in Figures 36 and 37 overlap, suggesting that intentions to leave do not vary greatly between professions. However, we notice some patterns, with pharmacy technicians, paramedics, administrative support workers, lab assistants, lab technicians, family counsellors, and addictions counsellors all having high levels of "thinking about quitting" and "likelihood of looking for a job outside the organization in the next year." We note that these are the same professions that experience high levels of everyday discrimination at work and also report high levels of job stress.

One paramedic stated the following:

> *"I am afraid for the future of EMS. Turnover and retention are not a priority, and the quality of paramedics is declining rapidly as competent paramedics leave Alberta or the profession."* (Survey respondent)

Another survey respondent summarized their feelings about leaving the allied health professions in Alberta as follows:

> *"We're short-staffed, underpaid, and getting burnt out. Many of us are looking to leave the province or health care. In my profession, shortage means longer wait times for patients with cancer, which means the disease spreads, leading to a death sentence. We have been working without a contract, wages are not keeping up with cost of living or other provinces/countries, we are not attracting enough staff to serve Alberta patients. If anything, we're losing health-care professionals at alarming numbers."* (Survey respondent)

Summary – Job Stress and Intentions to Leave

Allied health-care workers report extremely high levels of job-related stress. Over 70% state that their job is very stressful, 75% state that their job is emotionally draining, and 45% state that they are overwhelmed by the demands of their job. Those who identify as having a disability report higher levels of job stress on all measures. Women report higher levels of being overwhelmed by the demands of their job than men, controlling for other demographic variables.

The professions that score the highest when asked if their job is stressful and if their job is emotionally draining are acute care paramedics, family counsellors, primary care paramedics, mental health therapists, addictions counsellors, social workers, and pharmacy technicians. Speech language pathologists, family counsellors, mental health therapists, lab technicians, lab assistants, occupational therapists, and dietitians report the highest levels of feeling overwhelmed.

Allied health-care workers report extremely high levels of job-related stress.

Over 35% of allied health-care workers report that they often think about quitting their jobs. Education has a negative effect on thinking about quitting, while time in the profession has a positive effect on thinking about quitting, but a negative effect on the likelihood of looking for a job outside the organization (these may be people thinking about retirement). Those who identify as having a disability are both more likely to often think about quitting and more likely to be looking for a job outside the organization within the next year, controlling for other demographic variables.

Pharmacy technicians, paramedics, administrative support workers, lab assistants, lab technicians, family counsellors, and addictions counsellors all report high levels of thinking about quitting and a high likelihood of looking for a job outside the organization in the next year.

8. OPINIONS ABOUT CHANGES TO THE PROVINCIAL HEALTH-CARE SYSTEM

This section summarizes our findings related to our fifth major research question: *How do allied health-care workers in Alberta feel about the proposed changes to the provincial health-care system?*

We use data from two qualitative sources in this section. We asked an open-ended question in the survey: "*How do you feel about the current changes to the health-care system in Alberta?*" We received 1,623 responses to this question, indicating that 91% of survey respondents had an interest in this topic and wished to share their opinion.

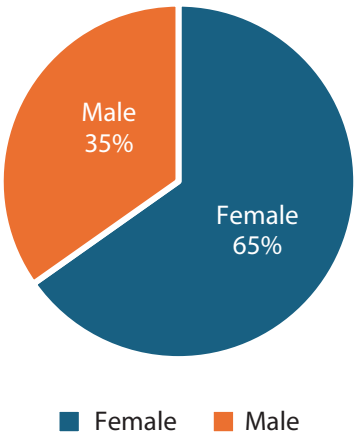
We combine this data with data from semi-structured in-depth interviews with 23 allied health-care workers. In the interviews, we asked respondents to reflect on the following question: "*How do you think the changes in Alberta Health will affect your work in the years to come?*"

Using thematic analysis (Braun & Clarke, 2006), we generated initial codes for both sets of qualitative data and then searched for themes. Two researchers conducted the initial coding and refined the specifics of the themes. We report on the themes that emerged in the data below, using representative quotations for illustration. We first describe the interview sample, then discuss the themes that emerged from the sets of qualitative data.

Interview Sample

We conducted 23 in-depth interviews with allied health-care workers in Alberta. On average, the interviews were 45 minutes long. The interviews were all conducted online and recorded with permission from the interviewees. The gender distribution of the interview sample is shown in Figure 38, indicating that we had a slight over-representation of males in the interview sample compared to the survey and the HSAA data. We did not have anybody who identified as nonbinary in our interview sample.

Figure 38: Gender Distribution of Interviewees

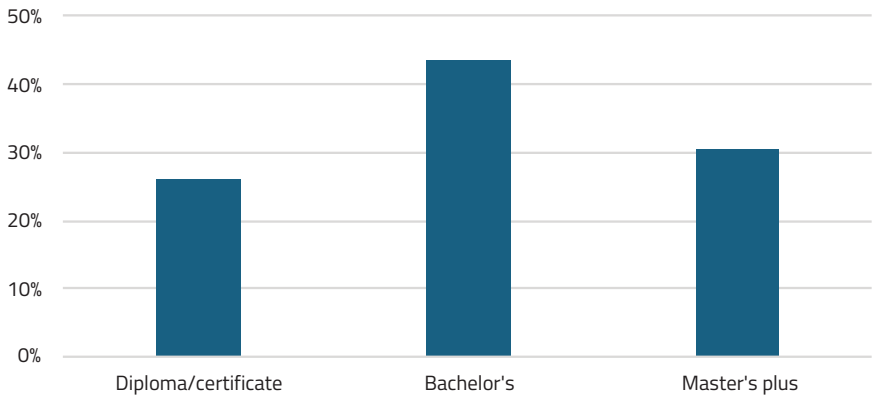


Note: N = 23.

On average, the interview respondents were 45.8 years old (SD 11.58). They ranged in age from late 20s to early 70s. Interview respondents were slightly older than the survey respondents and the HSAA members overall. On average, the interview respondents had been in the job for 18.8 years (SD 11.54). This ranged from just under five years to over 50 years. Thus, interview respondents had been in the profession slightly longer than survey respondents. Thirty per cent of the interview respondents identified as having a disability. Unfortunately, we did not have enough visible minority or immigrant respondents to analyze the interview data with respect to race/ethnicity or immigrant status; however, some of the quotes may refer to these intersecting identities.

On average, interview respondents were slightly more highly educated than the population of HSAA members. Figure 39 shows the education distribution for the interviewees.

Figure 39: Education of Interviewees



We had 17 different job titles represented in the qualitative interview data. Over half of the top 22 job categories that we have focused on for the quantitative analysis in earlier sections of the report were represented by the interview respondents.

Thematic Analysis of Qualitative Survey Data

The comments we received in the survey in response to the open-ended question *"How do you feel about the current changes to the health-care system in Alberta?"* were overwhelmingly negative. Almost 85% of respondents who answered this question (1,369 respondents) stated (some very strongly) that they were against the proposed changes. One hundred and forty-one comments (9%) were neutral, with people saying that they were uncertain about what the changes would mean, or that they did not have enough information yet to give an opinion. One hundred and thirteen (7%) were positive about the changes, saying that they might result in more efficiency and cost savings.

A thematic analysis of the responses yielded the following three overarching themes:

1. General negative reactions to changes
2. Negative emotions associated with changes
3. Fear and uncertainty

The comments we received in the survey in response to the open-ended question *"How do you feel about the current changes to the health-care system in Alberta?"* were overwhelmingly negative.

General Negative Reactions to Changes

Words that came up frequently in responses that indicated general negative reactions to the changes included: *awful, disaster, nightmare, sabotage, bad, negative, toxic,* and *burnout*. Some illustrative quotes:

> *"The Alberta health-care system is broken on so many levels that I fear that I will not be able to complete my career in health care due to workplace burnout and repetitive motion injuries and staffing shortages."* (Survey respondent)

> *"The system is falling apart at the seams. All of the pressure is on us to do more work, more overtime, while the government constantly sabotages a system that was already under pressure."* (Survey respondent)

> *"WE DESPERATELY NEED HELP!!!! Our work flexibility has been taken away, we feel we are under the microscope constantly. It's a toxic environment, and many are going on stress leave. It feels like animals are treated better."* (Survey respondent)

Several survey respondents referred to the changes as a 'dumpster fire', many used swear words in their reactions to the changes, and a number commented that they were considering leaving the province because of the changes.

Negative Emotions Associated With Changes

Words that came up frequently in responses that indicated negative emotions associated with the changes included: angry, abandoned, distress, disappointed, disgusted, frustrated, demoralized, horrified, and disappointed. Some illustrative quotes:

> *"I feel abandoned and unappreciated by the government and provincial leaders. The choices they're making make zero sense on the front line and make the job much more difficult than it should be. The changes are causing upheaval and delays, leading to a significant drop in trust in health-care workers across the province, and I feel as though the government is trying to poison public perception by making changes that are impossible to work with, making us look incompetent."* (Survey respondent)

> *"The degree of moral distress is exponentially increased with this government. There is hopelessness, helplessness, dread, and despair. The policies of this government are making my job unethical, discriminatory, and inhumane. I have never felt this low about health care."* (Survey respondent)

> *"It's depressing, front-line workers are having to do more with much much (sic) less to meet the demands of caring for their patients. Leadership tends to exploit the kindness of front-line staff who are patient-facing because they feel they cannot let the patient or their families down — so they stay overtime for free, they go the extra mile, they perform the tasks on their own when really it requires help. Because they care about helping people. This leads to burnout and frustration, and eventually people leave."* (Survey respondent)

"The policies of this government are making my job unethical, discriminatory, and inhumane. I have never felt this low about health care."

(Survey respondent)

Fear and Uncertainty

Many respondents expressed a great deal of fear and uncertainty over the changes. Common words in these responses were: anxious, worried, concerned, uneasy, nervous, apprehensive, afraid, terrified, scared, and frightened. Some illustrative quotes:

> *"We feel threatened every day. Our job is not secure."* (Survey respondent)

> *"The changes are terrifying. I have no sense of certainty about the future of my employment, what the vision of the organization will be, and how it will impact the clients we serve. The lack of transparent information is incredibly stressful — I've never been worried about being let go before, but it's a frequent worry now."* (Survey respondent)

> *"I am worried about the stability of my job. I am worried they will continue to cut in many areas when we are already struggling with staffing. One of our positions has already been cut. I am worried they'll take away or negatively affect my pension. I am worried colleagues will quit and go elsewhere, which is more work and stress on current staff (training, under-staffed until they are trained, etc.)."*
> (Survey respondent)

Thematic Analysis of Interview Data

We conducted a thematic analysis of the responses to the question about the provincial health-care changes in the interview data. Out of the 23 interviewees, 18 (78%) expressed negative feelings about the changes. Five people (22%) expressed neutral opinions. No one was positive.

The dominant theme in the responses was an overall negative impression of the changes, what they mean for health care in Alberta, and what they mean for patient care.

Overall Negative Impressions

The following quotes illustrate respondents' overall negative impressions of the changes.

> *"I don't actually see any advantages. I know there's been talk of a lot of advantages, but all we've noticed so far... is that I just have a different email that's a little bit harder to type in. We're really not seeing any advantages on the ground. All we're seeing is the disadvantages."*
> (Interviewee — social worker)

> *"These changes are definitely negative... I mean, it goes against all our ethics and values... the patients and their families are going to suffer, I mean, let's face it, American health care is not a very good example, but that's the road we're going down."*
> (Interviewee — addictions counsellor)

> *"I do worry about the changes for patient care. I think most of us do."*
> (Interviewee — paramedic)

> *"I feel like the way that AHS is getting restructured... I don't see how that's going to fix the problems that are happening. I feel like it's going to be hard on everyone... breaking us all apart is... not adding just more stress with all these changes instead of actually solving the day-to-day problems that people are facing."*
> (Interviewee — family counsellor)

We further analyzed the interview responses for themes and traced five recurring themes.

1. Lack of involvement of front-line workers
2. Uncertainty and worry about jobs
3. Increased complexity and fragmentation
4. Move toward privatization
5. Frustration with repeated restructuring

Lack of Involvement of Front-Line Workers

The lack of involvement of front-line health-care workers in policy decision-making processes has led to frustration and disillusionment within the sector. Many workers feel that decisions impacting their day-to-day responsibilities are made by individuals who are disconnected from the realities of the work environment. This disconnect has resulted in policies that are poorly aligned with the practical challenges health-care workers face, undermining the quality of care and employee morale.

> *"How they've been going about these changes, I don't think are (sic) very good. They don't really talk to the front line. Someone in a boardroom, someone looking at paper or data makes decisions, right? They don't see the physical reality of what is happening with us on the front line."*
> (Interviewee — lab assistant)

> *"They're not the front line, but they're kind of speaking up as if they are in some ways..."*
> (Interviewee — physiotherapist)

> *"I have a wonder about how much consultation was actually being done. Because they're saying they talked to somebody, but they're not saying who they talked to..."*
> (Interviewee — family counsellor)

Respondents question whether the voices of those directly involved in patient care are truly being heard and integrated into decisions affecting their work, and they believe that this lack of involvement will lead to proposed changes that ultimately fail once implemented.

"I am worried because of the direction we're moving. It seems like they're not taking the advice that was given to them… instead of taking any of those suggestions, they just privatize us, and then it says seeing (sic) why the privatization didn't work."
(Interviewee — lab tech)

"Whoever wants to make the changes will make the changes. Yeah, and I think that's too bad because really, it's all about patient care… I think, again, we're going back to a system where there's going to be a disconnect of communication."
(Interviewee — social worker)

Uncertainty and Worry About Jobs

Restructuring has created instability for health-care workers, particularly regarding job security and mobility. Interviewees expressed worry about their future with AHS.

> *'Uncertainty… I don't know where it's going. I don't know where I'm going to fall.'* (Interviewee — paramedic)

> *"When it was all as one Alberta Health Services, my seniority and experience transferred across positions. But now, with all these different agencies, when the splitting happened, you had to pick where you were going… Now I'm viewed as an external candidate."*
> (Interviewee — social worker)

These shifts in the AHS organization make it more difficult for workers to move between roles within the system, disrupting career progression, and limiting opportunities.

> *"I'm worried that it's going to prevent my ability to take other positions that are not in acute care."*
> (Interviewee — physiotherapist)

Another key source of uncertainty arises from a perceived weakening of union strength, which is seen as diminishing the collective bargaining power of health-care workers.

> *'…less bargaining power in our union. A lot of uncertainty, which is creating just a culture of feeling like they're being against each other… I think it makes it a lot easier to have more direct control over people in health-care professions. For me, it's a disadvantage in my work.'*
> (Interviewee — social worker)

The erosion of union power could undermine efforts to ensure a safe and supportive working environment for health-care workers, particularly in fields that require emotional resilience, such as mental health.

> *'If the unions don't have the strength behind numbers, then it's harder to advocate for things like psychological safety or the working conditions... psychological safety is a huge thing in my world.'*
> (Interviewee — family counsellor)

The uncertainty surrounding future changes contributes to increasing burnout, with many workers feeling overwhelmed by the unpredictability of their roles and the broader system.

> *'We're all burned out from COVID and now going through this, it's just been really hard... we don't know what's going to happen.'*
> (Interviewee — lab tech)

Increased Complexity and Fragmentation

Respondents noted that the restructuring of Alberta's health-care system has led to increased complexity and fragmentation, creating barriers to communication, service delivery, and career mobility. Health-care workers express concern that these changes will not only fail to improve efficiency but also exacerbate existing problems, making collaboration more difficult and further weakening the system.

The division of health care into separate pillars is seen as a move away from a holistic, patient-centred care.

> *"When you split this pillar apart, you actually do less service for them than you do because you don't look totally at bodies... It's really separating the mind and body, which is moving away from an evidence-based practice."*
> (Interviewee — lab tech)

Many workers are concerned that, rather than streamlining operations, the restructuring will increase inefficiencies.

Many workers are concerned that, rather than streamlining operations, the restructuring will increase inefficiencies.

> *"One doctor orders a test in the lab, and another doctor orders almost the same, but maybe one more, and you have to run those samples twice... They're collecting double tubes, making me run double the samples. When we used to just CC it to the other doctors."*
> (Interviewee — lab tech)

Health-care professionals also worry that separating different services and professions in AHS will weaken collaboration.

> *" I think that it will overall destroy the resemblance of cooperation we have in our health-care system. I think it'll specifically start to pit those interpersonal relationships against each other."*
> (Interviewee – paramedic)

Move Toward Privatization

The business-driven approach to health-care reform in Alberta has led to significant disruptions, with workers expressing concerns about increased burnout, inefficiencies, and a focus on profits rather than patient care. These changes have created an environment where employees are grappling with constant shifts in management, policies, and workplace expectations, often at the expense of their well-being and the quality of care they can provide. The privatization of services has introduced significant challenges.

> *"We were already burned out and then they turned around and privatized us, and that didn't work… we had to learn all new systems while already burned out."* (Interviewee — lab tech)

Concerns about the business-oriented restructuring are further amplified by the perception that roles within the system are increasingly being justified based on their financial impact.

> *"Unless this role evolves to clearly demonstrate its ability to meet the bottom line… it won't survive."* (Interviewee — social worker)

The shift toward more layers of management and bureaucratic processes is another area of concern.

> *"There are too many cooks in the kitchen and not enough feet on the floor."* (Interviewee — combined lab and x-ray tech)

Frustration With repeated Restructuring

Many of the respondents, especially those who had worked in allied health care in Alberta for a long time, express deep frustration over the constant restructuring of the health-care system, which they perceive as politically driven rather than genuinely reformative. The ongoing cycle of centralization and decentralization has led to instability, stress, and skepticism about the effectiveness of these changes.

Many workers are concerned that the government is making the same mistakes, ignoring past failures.

Many workers are concerned that the government is making the same mistakes, ignoring past failures.

The failed privatization of medical labs is a key example of how short-term political goals can overshadow practical health-care needs.

> *"I'm very worried at the way that the government is. It seems like they're moving to privatization again. And we saw that didn't work for the labs… They're not taking into consideration what just happened and how that's going to affect the rest of the system."*
> (Interviewee — lab tech)

The frequency of health-care restructuring is frustrating to allied health-care workers.

> *"Every time the government tries to change health care, it's just a back-and-forth. One government centralizes it, the other government decentralizes it… and it's just a lot of name changing. It's kind of the same."* (Interviewee — medical radiation therapist)

> *"Everyone tries to reinvent the wheel, but the wheel was already made… We were many little entities, turned into one big entity, and now we seem to be breaking down into little entities again."*
> (Interviewee — paramedic)

Long-time health-care workers recall that this pattern of restructuring dates back to major budget cuts in the 1990s, which had lasting negative effects on the system.

> *"I was there in the 90s when all these changes came… when our health-care system started falling apart."*
> (Interviewee — lab tech)

This historical perspective suggests that repeated political interventions have weakened rather than strengthened Alberta's health-care system over time. The repeated upheavals have also taken a psychological toll on health-care workers.

> *"As soon as there's perhaps a government change again, potentially in a few years, everything might just have to revert back… that's just more change and more stress."* (Interviewee — family counsellor)

"...the money is always thrown at a new idea, which isn't a new idea. It's a rehashed old idea trying to save or sprint when maybe the issue is they're not throwing money at the right place. Maybe they should be throwing money at the employee, and they're not doing that. They're throwing it everywhere else but the employee if they continue to have the same old problems and these same old rehashed ideas."
(Interviewee — paramedic)

Summary – Opinions About Changes to the Provincial Health-Care System

To conclude the eighth section of the report, we find that overall, allied health-care workers have an extremely negative view of the current and proposed changes to the provincial health-care system.

Overall, allied health-care workers have an extremely negative view of the current and proposed changes to the provincial health-care system.

Analyzing over 1,600 qualitative responses to questions about the changes in the survey, we find that almost 85% are negative. A thematic analysis of the response texts shows that they contain generally negative reactions to the changes, strong negative emotions associated with the changes, and many expressions of fear and uncertainty.

Analyzing 23 in-depth interviews with allied health-care workers in Alberta, we find that almost 80% express an overall negative reaction to the changes. Thematic analysis of these interview responses shows that health-care workers are worried about the lack of involvement of front-line workers in planning and implementing the changes, which they believe will lead to increased complexity and fragmentation of services. They express uncertainty and worry about their jobs, and fear that the changes indicate a move toward privatization of the health care system. Many respondents noted frustration with repeated restructuring of the system, which does not lead to positive change.

9. SUMMARY

We present a summary of our report findings below, which then leads to our recommendations in Section 10.

Pay inequities

Pay inequities among allied health-care workers in Alberta are contributing to job dissatisfaction, stress, and feelings of workplace discrimination. Women make less than men in the allied health-care profession, controlling for age and education. Professions that have a higher percentage of females are paid lower wages than those with a lower percentage of females. In addition, disability status and visible minority status affect pay among allied health-care workers in Alberta. Consequently, female employees, those who identify as disabled, and visible minorities feel burnt out and undervalued, leading to high levels of job dissatisfaction.

Discrimination

Allied health-care workers in Alberta report very high rates of everyday discrimination at work and employment discrimination. Over 80% report experiencing everyday discrimination at work at least a few times a year, with workers reporting monthly (52%), weekly (32%), and daily (15%) experiences of discrimination on the job. Professions that report the highest frequency of everyday discrimination include paramedics, administrative support staff, lab assistants, and pharmacy and medical radiation technicians.

Employment discrimination ("unfairly not hired," "not promoted," or fired) is reported by 40% of respondents. Individuals with higher levels of education report less employment discrimination, but older individuals and those who identify as having a disability report higher levels. Professions that report the highest levels of employment discrimination include addictions counsellors, administrative support workers, advanced care paramedics, and lab assistants. At the organizational level, respondents blame nepotism, favouritism, and bad management for experiences of employment discrimination.

These experiences of discrimination lead to job dissatisfaction and high levels of job-related stress.

Stress

Allied health-care workers report extremely high levels of job-related stress. Over 70% state that their job is very stressful, 75% state that their job is emotionally draining, and 45% state that they are overwhelmed by the demands of their job. Those who identify as having a disability report higher levels of job stress on all measures. Women report higher levels of being overwhelmed by the demands

High levels of job stress, along with current uncertainties about AHS reforms, are contributing to a culture of distrust among allied health-care workers.

of their job than men, controlling for other demographic variables. This may be related to pay inequities. The professions that score the highest when asked if their job is stressful and if it is emotionally draining are acute care paramedics, family counsellors, primary care paramedics, mental health therapists, addictions counsellors, social workers, and pharmacy technicians. High levels of job stress, along with current uncertainties about AHS reforms, are contributing to a culture of distrust among allied health-care workers. Many are considering leaving the province or leaving their profession altogether. These findings align with other recent surveys of physicians, nurses, and allied health-care workers in Alberta and nationwide, which also find that many health-care providers are considering leaving their jobs (see Alberta Medical Association 2024; Canadian Federation of Nurses Unions 2024; Alberta Association of Nurses 2025; D'Alessandro-Lowe et al, 2024).

Retention

Over 35% of allied health-care workers report that they often think about quitting their jobs, and 12% of the workers report that they are very likely to look for a job outside the organization in the next year. Those who identify as having a disability are both more likely to often think about quitting and more likely to be looking for a job outside the organization within the next year, controlling for other demographic variables. Pharmacy technicians, paramedics, administrative support workers, lab assistants, lab technicians, family counsellors, and addictions counsellors all report high levels of thinking about quitting and a high likelihood of looking for a job outside the organization in the next year.

Opinions about AHS changes

The opinions of allied health-care workers about the proposed changes to the provincial health-care system are overwhelmingly negative. Respondents have strong negative emotions associated with the changes, and many expressed fear and uncertainty related to the reform. Workers are worried about the lack of involvement of front-line workers in planning and implementing the changes, which they believe will lead to increased complexity and fragmentation of services.

10. RECOMMENDATIONS

Following from our findings in the previous section, we present two sets of recommendations. One set addresses allied health-care professionals as a group, and the second is profession-specific.

General Recommendations

1. Address Pay Inequities for Allied Health-Care Workers

a. Further study and conduct pay equity audits to assess pay inequities by profession, gender, disability status, and visible minority status. These studies could be conducted by unions, professional organizations, or academic partners.

b. Apply corrective measures as needed if inequities are identified (either by profession or by demographic group). Unions or professional organizations should seek to address these inequities through collective bargaining or other negotiations with employers.

c. Ensure standardized and transparent pay scales based on experience, education, and job responsibilities. The pay scales are currently set by Alberta Health Services. Under the new provincial health-care model, it will be important to ensure that the pay scales are the same across the four new agencies: Primary Care, Acute Care, Continuing Care, and Mental Health and Addictions.

2. Reduce Workplace Discrimination for Allied Health-Care Workers

a. Encourage workers to report incidents of discrimination through secure and anonymous reporting systems. There should be no negative repercussions for anyone who reports incidents of harassment or discrimination. These reporting systems need to be set up in every workplace.

b. Provide training on workplace rights and how to respond to discriminatory practices. Training should be provided by unions, professional organizations, and the employer.

c. Promote peer-support networks for marginalized workers to share experiences and strategies for addressing discrimination. Such networks could be set up within individual workplaces, or online networks could be set up across workplaces.

d. Implement robust anti-discrimination policies with clear consequences for violations. Such policies need to be implemented at the provincial level and should cover all health-care workplaces.

e. Establish training programs for all hiring and promotion committees to reduce unconscious bias, ensuring fair opportunities for all demographic groups. Training should be provided by unions, professional organizations, and the employer.

f. Focus particularly on training around ableism in the workplace. This training should be mandated provincially, take place within each workplace, and include modules on disability inclusion and barriers to access.

3. Address Job-Related Stress and Retention Issues for Allied Health-Care Workers

a. Promote self-care strategies, mental health support, and work-life balance initiatives among health-care workers. These strategies should be developed and promoted within the workplace.

b. Reduce workload burdens by increasing staffing levels and improving resource allocation. These resources need to come from the provincial government.

c. Establish peer support and mentorship programs to address emotional exhaustion and burnout. Such networks could be set up within individual workplaces, or online networks could be set up across workplaces.

d. Offer flexible work arrangements, such as hybrid work models, where feasible. The four newly formed health-care agencies in Alberta would need to coordinate these policies.

e. Provide leadership training to encourage leaders to create supportive work environments and reduce toxic workplace cultures. Training should be provided within the workplace.

f. Conduct exit interviews and worker satisfaction surveys to identify and address key reasons for staff turnover. While interviews and surveys would be implemented within each workplace, they should be standardized across the provincial system to enable comparisons.

4. Ensure Meaningful Involvement of Allied Health-Care Workers in Health-Care System Changes

a. Establish a formal advisory council composed of allied health-care workers to provide input to AHS on policy changes. The provincial government should set up this council.

b. Conduct regular consultations with staff and incorporate their feedback into policy implementation. This should become part of the policy development process at the provincial level.

c. Create internal task forces to assess the impact of health-care changes on employees and develop mitigation strategies. Individual task forces should be set up within each of the new agencies (Primary Care, Acute Care, Continuing Care, and Mental Health and Addictions), and representatives from each agency's task force should meet as an oversight group.

d. Encourage allied health-care workers to participate in advocacy groups and policy discussions. Such encouragement will generally come from unions and professional organizations.

e. Provide training in policy literacy and advocacy to enable workers to contribute meaningfully to discussions about health-care reforms. Unions are best placed to provide such training.

5. Workers With Disabilities

a. Create a task force to address issues faced by allied health-care workers with disabilities.

b. Conduct a community-based study of disabled workers in allied health professionals:

- What barriers are they facing?
- How can these barriers be overcome?
- Present report to AHS, HSAA, etc.
- Implement changes to reduce wage inequities, discrimination, and stress for workers with disabilities.

c. Implement a stigma-reduction campaign focused on countering ableism and supporting those with disabilities.

d. Ensure that all workplaces are accessible and inclusive (including neuro-inclusive).

Profession-Specific Recommendations

Profession-specific recommendations to be implemented government agencies, individual workplaces, and professional organizations, with the support of the union(s).

1. Paramedics (Primary Care and Advanced Care)
(High levels of job-related stress and burnout; frequent experiences of discrimination at work; high likelihood of quitting)

- **a.** Offer specialized mental health support, including trauma-informed counselling.
- **b.** Improve shift scheduling to reduce burnout, including mandatory rest periods and shorter shifts.
- **c.** Increase funding for paramedic services to ensure adequate staffing and appropriate compensation.
- **d.** Train on workplace rights and how to respond to discrimination.

2. Pharmacy Technicians
(High levels of feeling overwhelmed at work; high likelihood of looking for jobs outside the organization)

- **a.** Provide continuing education programs to expand career advancement opportunities.
- **b.** Reduce workload by hiring additional support staff and automating administrative tasks where possible.
- **c.** Introduce retention incentives, such as awarding wage increases or tuition reimbursement in recognition of further training.

3. Addictions Counsellors and Mental Health Therapists
(High levels of stress and emotional exhaustion; frequent experiences of everyday and employment discrimination)

- **a.** Implement peer support groups and resilience training.
- **b.** Provide mandatory anti-discrimination training for supervisors.
- **c.** Implement 'anti-discrimination/harassment' campaigns aimed at clients.
- **d.** Increase public funding for mental health services to reduce caseloads.

4. Lab Assistants and Lab Technicians

(Frequent experiences of discrimination, particularly in hiring and promotion; high levels of stress and likelihood of quitting)

- **a.** Provide career mentoring and leadership development programs to increase promotion opportunities.
- **b.** Establish clearer promotion pathways and eliminate discriminatory hiring practices through structured, transparent evaluation criteria.
- **c.** Enforce stricter oversight on discrimination in hiring practices.

5. Social Workers and Therapy Assistants

(High emotional exhaustion and burnout; frequent discrimination based on gender and social class)

- **a.** Provide professional development opportunities, such as trauma-informed practice training.
- **b.** Establish workplace mental health initiatives, including introducing designated debriefing times.
- **c.** Increase social work funding to ensure manageable caseloads and better resource allocation for front-line support.
- **d.** Provide training on detecting and responding to discrimination.

6. Administrative Support Workers

(High levels of employment discrimination, including favouritism and nepotism; high likelihood of thinking about quitting)

- **a.** Offer training in workplace advocacy and negotiation skills to empower workers in challenging unfair practices.
- **b.** Implement anonymous feedback mechanisms to report and track favouritism and nepotism in hiring and promotion decisions.
- **c.** Mandate transparent hiring and promotion policies.

11. CONCLUSION

We would like to conclude with two sets of quotes from our participants, which we feel illustrate not only the current mood of allied health-care workers in Alberta but also their dedication to their professions and their patients.

The current mood is bleak, as allied health-care workers in Alberta experience high levels of discrimination, are overwhelmingly stressed, worry about the current and proposed changes to AHS, and think about leaving.

> *"I feel like I am failing my patients daily, and I am exhausted and have poor mental health due to my employer not involving, assisting, or supporting me in a job that is unmanageable."*
> (Survey respondent)

> *"I am very concerned about the emotional and mental health of everyone. People are distraught. New staff are drowning. Old staff are also drowning. Managers are also having a difficult time."*
> (Survey respondent)

Yet, many allied health-care workers expressed a strong dedication to their work, their professions, their co-workers, and most of all their patients/clients.

> *"I have hope… I continue to have hope. We work hard. We actually care. I spend more time with my coworkers than I do with my own family. And I think that camaraderie and the folks that we do have on the ground truly do what they do because they're passionate about it. Because we certainly aren't getting rich doing it. And there's not a whole lot of 'thanks' or 'good jobs'. But that end result when I see one of my kids complete the program, and then I hear down the road that they're doing really well… That brings joy to my heart. And I think that's the end goal for all of us: to implement change, to see these kids change."*
> (Interviewee — addictions counsellor)

> *"I do feel some positive points are, the people I work with are generally there for the right reasons, and we really look out for each other, and we look out for our patients, and we're there for our patients. For the most part — you get the odd bad egg —, but for the majority it's a really rewarding career. I don't want to leave it. I do love my job."*
> (Interviewee — medical radiation therapist)

> *"There's lots of positives in the sense that I find just the people overall that work in our hospital that I work with are just lovely people, and again, we're all just family and patient-focused, and that's what we care about. And I think overall, everyone in health care gets into that role because we want to do good for our patients and families and*

Allied health-care workers are an essential piece of the Alberta health-care system and deserve to be treated equitably so that they can continue to provide high levels of care for all Albertans.

> *the people of Alberta. So, what's definitely a positive thing is that the people I work with are wonderful… we're just trying to do the best with what we have."*
> (Interviewee — family counsellor)

It is our sincere hope that this report helps to highlight some of the inequities and difficulties currently facing allied health-care workers in Alberta, and that some of the recommendations can be acted upon. Allied health-care workers are an essential piece of the Alberta health-care system and deserve to be treated equitably so that they can continue to provide high levels of care for all Albertans.

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APPENDICES

Appendix A: Survey Questions

Alberta Allied Health Workers Study (REB24-0352)

Section A – Demographic Questions

1. **What was your sex at birth?**
   Male
   Female
   Intersex
   Other _____
   Prefer not to say

2. **What is your gender identity?**
   Man
   Woman
   Nonbinary
   None of these applies to me, I prefer to identify as: _____
   Prefer not to say

3. **How old are you?** _____ years

4. **What agency/company do you work for currently? (ex. AHS, Covenant Health)** _____

5. **Please provide your exact job title.** _____

6. **How long have you worked in this profession (in years)?** _____

7. **What is the highest level of education you have completed?**
   Less than high school
   High school graduate
   Post-secondary diploma
   Bachelor's degree
   Master's degree
   Md
   PhD

8. **Do you have additional professional qualifications that were not captured by the previous question about your education?**
   No
   Yes – Please specify_____

9. **Did you complete your education in Canada?**
   Yes
   No – In which country? _____

10. What is your area of educational specialization?

_____

11. People living in Canada come from many different cultural and racial backgrounds. Are you: (can pick more than one)

Arab
Black
Chinese
Filipino
Indigenous (including First Nations, Inuit, and Métis)
Japanese
Korean
Latin American
South Asian
South East Asian
West Asian
White
Other

12. Were you born in Canada?

Yes
No
If you were not born in Canada, what year did you move to Canada?

_____

13. Are you a Canadian citizen?

Yes
No, I am a permanent resident.
No, I am in Canada on a visa.
If you were not born in Canada, what year did you move to Canada?

_____

14. What is your current marital status?

Married/common law
Separated/divorced
Widowed
Never married

15. How many children do you have? _____

16. How many children do you have who are 18 or under and live in the same house as you?_____

17. **According to the Accessible Canada Act, disability means any impairment, including a physical, mental, intellectual, cognitive, learning, communication, or sensory impairment — or a functional limitation — whether permanent, temporary, or episodic in nature, or evident or not, that in interaction with a barrier, hinders a person's full and equal participation in society. Based on this definition, do you personally identify as having a disability?**
    Yes
    No

Section B – Health-Related Questions

1. **In general, would you say your mental health is:**
    Excellent
    Very Good
    Good
    Fair
    Poor

2. **In general, would you say your physical health is:**
    Excellent
    Very Good
    Good
    Fair
    Poor

3. **Thinking about the amount of stress in your life, would you say that most of your days are:**
    Not at all stressful
    Not very stressful
    A bit stressful
    Quite a bit stressful
    Extremely stressful

4. **Using the bar to adjust the emoji below, please indicate how you feel about your life as a whole right now, where the top of the bar and the smiley face would indicate "very satisfied" and the bottom of the bar and the frowny face would indicate "very dissatisfied".**

5. **Thinking specifically about the past six months, how would you rate your level of anxiety on a scale from 0 to 10, with 0 being "not at all anxious" and 10 being "extremely anxious"?**

6. **Thinking specifically about the past six months, how often have you experienced feelings of sadness or hopelessness, with 0 being "never" and 10 being "constantly"?**

7. **Thinking specifically about the past six months, how would you rate the overall quality of your sleep on a scale of 0 to 10, with 0 being "very poor" and 10 being "excellent"?**

Section C – Job Satisfaction

Please rate your level of agreement with the following statements about your current job

1. **My job is very stable**
   Strongly agree
   Agree
   Neither agree nor disagree
   Somewhat disagree
   Strongly disagree

2. **My job is emotionally draining**
   Strongly agree
   Agree
   Neither agree nor disagree
   Somewhat disagree
   Strongly disagree

3. **My job is very stressful**
   Strongly agree
   Agree
   Neither agree nor disagree
   Somewhat disagree
   Strongly disagree

4. **I get a lot of support from my colleagues at work**
   Strongly agree
   Agree
   Neither agree nor disagree
   Somewhat disagree
   Strongly disagree

5. **I get a lot of support from my supervisors/superiors at work.**
   Strongly agree
   Agree
   Neither agree nor disagree
   Somewhat disagree
   Strongly disagree

6. **I am overwhelmed by the demands of my job.**
   Strongly agree
   Agree
   Neither agree nor disagree
   Somewhat disagree
   Strongly disagree

7. **My job is extremely rewarding.**
   Strongly agree
   Agree
   Neither agree nor disagree
   Somewhat disagree
   Strongly disagree

8. **My job is mentally challenging.**
   Strongly agree
   Agree
   Neither agree nor disagree
   Somewhat disagree
   Strongly disagree

9. **My job is physically challenging.**
   Strongly agree
   Agree
   Neither agree nor disagree
   Somewhat disagree
   Strongly disagree

10. **I often think about quitting my job.**
    Strongly agree
    Agree
    Neither agree nor disagree
    Somewhat disagree
    Strongly disagree

11. **On a scale from 0 to 10, how much control or authority do you have over your work tasks and decision-making at work, with 0 being "no control" and 10 being "complete control"?**

12. **On a scale from 0 to 10, how much opportunity do you have to use your skills and abilities in your current job role, with 0 being "very limited" and 10 being "extensive"?**

13. **On a scale from 0 to 10, where 0 means "very unlikely" and 10 means "very likely," how likely is it that you will look for a job outside of the organization where you currently work during the next year?**

Section D – Discrimination at Work

In your day-to-day life at work, since you have worked for your current employer, how often have any of the following things happened to you?

1. **You are treated with less courtesy or respect than other people.**
   Almost every day
   At least once a week
   A few times a month
   A few times a year

Less than once a year
Never

2. **You receive poorer service than other people.**
   Almost every day
   At least once a week
   A few times a month
   A few times a year
   Less than once a year
   Never

3. **People act as if they think you are not as smart as other people.**
   Almost every day
   At least once a week
   A few times a month
   A few times a year
   Less than once a year
   Never

4. **People act as if they are afraid of you.**
   Almost every day
   At least once a week
   A few times a month
   A few times a year
   Less than once a year
   Never

5. **You are threatened or harassed.**
   Almost every day
   At least once a week
   A few times a month
   A few times a year
   Less than once a year
   Never

What do you think is the main reason for these experiences? (YOU CAN CHECK MORE THAN ONE).
Your ancestry or national origins
Your sex
Your gender identity
Your race
Your age
Your religion
Your height
Your weight
Some other aspects of your physical appearance
Your sexual orientation
Your education or income level
A physical disability

Your shade of skin colour
Pregnancy
Other (specify) _ _ _ _ _ _ _ _

Have any of the following ever happened to you at work?

At any time in your life, have you ever been unfairly fired?
Yes
No

For unfair reasons, have you ever not been hired for a job?
Yes
No

Have you ever been unfairly denied a promotion?
Yes
No

What do you think is the main reason for these experiences? (YOU CAN CHECK MORE THAN ONE).
Your ancestry or national origins
Your sex
Your gender identity
Your race
Your age
Your religion
Your height
Your weight
Some other aspects of your physical appearance
Your sexual orientation
Your education or income level
A physical disability
Your shade of skin colour
Pregnancy
Other (specify) _ _ _ _ _ _ _ _

Section E– Open-Ended Questions

How do you feel about the current changes to the health-care system in Alberta?

Is there anything else you would like to tell us about your experiences as an allied health worker in Alberta?

Appendix B: Interview Guide

Alberta Allied Health Workers Study (REB24-0352)

Section A – Demographic Questions

1. **Sex at birth**
   Male
   Female
   Intersex
   Other _____

2. **Gender**
   Male
   Female
   Nonbinary
   None of these applies to me, I prefer to identify as: _____

3. **According to the Accessible Canada Act, disability means any impairment, including a physical, mental, intellectual, cognitive, learning, communication, or sensory impairment — or a functional limitation — whether permanent, temporary, or episodic in nature, or evident or not, that in interaction with a barrier, hinders a person's full and equal participation in society. Based on this definition, do you personally identify as having a disability?**
   (Yes/No)

4. **Age** ____

5. **Job title** _____

6. **How long have you worked in this profession?** _____

7. **Where do you work?**
   Calgary
   Edmonton
   Red Deer
   Lethbridge
   Grande Prairie
   Medicine Hat
   Other: _____

8. **Do you work part-time or full-time?** _____

9. **Highest level of education completed**
   Less than high school
   High school graduate
   Post-secondary diploma
   Bachelor's
   Master's

Md
PhD

10. **Did you complete your education in Canada?**
    Yes
    No – if no, in which country_____

11. **Area of educational specialization** _____

12. **People living in Canada come from many different cultural and racial backgrounds. Are you: (can pick more than one)**
    Arab
    Black
    Chinese
    Filipino
    Indigenous (including First Nations, Inuit, and Métis)
    Japanese
    Korean
    Latin American
    South Asian
    South East Asian
    West Asian
    White
    Other

13. **Immigrant status**
    Non-immigrant
    Immigrant
    Non-permanent resident

14. **If immigrant or NPR — When did you move to Canada? (Year)**

15. **Marital status**
    Married/common law
    Separated/divorced
    Widowed
    Never married

16. **Number of children** _____

17. **Number of people who live in your household** _____

Section B – Interview prompts

1. **Please tell me about your career trajectory. When did you start this work? How long have you worked in this job?**

2. **What do you enjoy about your work?**

3. **What do you find challenging about your work?**

4. **Have you ever felt that you have been held back in your career due to discrimination of any kind? (If yes, probe for reasons why)**
5. **How do you think the changes in Alberta Health will affect your work in the years to come?**
6. **Is there anything else you would like to tell me about your work?**

Appendix C: Top 85 Job Titles From HSAA Data

Job Title	N	Percent
Lab Assistant	3,319	11.7
Lab Technologist	2,016	7.1
Primary Care Paramedic	1,692	6.0
Respiratory Therapist	1,493	5.3
Advanced Care Paramedic	1,403	4.9
Social Worker	1,378	4.8
Occupational Therapist	1,297	4.6
Therapy Assistant	1,291	4.5
Medical Radiation Technologist	1,185	4.2
Physiotherapist	1,171	4.1
Pharmacist	1,137	4.0
Pharmacy Technician	1,093	3.8
Mental Health Therapist	742	2.6
Dietitian	720	2.5
Addictions Counsellor	524	1.8
Speech Language Pathologist	512	1.8
Combined Lab and X-Ray Technologist	468	1.6
Health Information Management Professional	454	1.6
Administrative Support	389	1.4
Emergency Communications Officer	350	1.2
Psychologist	344	1.2
Diagnostic Sonographer	332	1.2
Recreational Therapist	315	1.1
Family Counsellor	284	1.0
Public Health Inspector	274	1.0
Health Promotion Facilitator	228	0.8
MRI Technologist	220	0.8
Mental Health Clinician	214	0.8
Biomedical Equipment Technologist	213	0.7
Radiation Therapist	186	0.7
Cardiology Technologist	169	0.6

Infection Control Practitioner	152	0.5
Clinical Supervisor	148	0.5
Nuclear Medicine Technologist	140	0.5
Registered Dental Assistant	135	0.5
Research Assistant	133	0.5
Emergency Medical Responder	89	0.3
Transportation Representative	85	0.3
Child Development Specialist	84	0.3
Clinical Research Coordinator	76	0.3
Lab Scientist	72	0.3
Child Life Specialist	69	0.2
Audiologist	65	0.2
Clinical Genetics Technologist	60	0.2
Education Consultant	60	0.2
Clinical Informatician	59	0.2
Outreach Worker	57	0.2
Vehicle Equipment Supplies Services Technician	57	0.2
Tissue Specialist	55	0.2
Psychometrist	54	0.2
Psychosocial Rehabilitation Assistant	51	0.2
Electroneurophysiology Technologist	48	0.2
Clinical Educator	47	0.2
Dental Hygienist	47	0.2
Pathology Assistant	44	0.2
Genetic Counsellor	43	0.2
Dosimetrist	40	0.1
Lab Specialist	39	0.1
Program Facilitator	37	0.1
Kinesiologist	36	0.1
Clinical Information Resource Specialist	35	0.1
Polysomnographic Technologist	35	0.1
Cardiovascular Perfusionist	33	0.1
Continuing Care Counsellor	32	0.1

Health Educator	29	0.1
Clinical Instructor (Technologies)	27	0.1
Mammography Technologist	24	0.1
Physical Therapist	24	0.1
Program Assistant	24	0.1
Cancer Registrar	23	0.1
Environmental Services Worker	23	0.1
Radiopharmacy Technologist	23	0.1
Research and Planning Officer	23	0.1
Behavioural Specialist	22	0.1
Ophthalmic Technician	22	0.1
Indigenous Hospital Liaison	20	0.1
Educator	19	0.1
Exercise Specialist	19	0.1
Neuropsychologist	17	0.1
Orthoptist	17	0.1
Physiological Laboratory Technologist	17	0.1
Rehabilitation Practitioner	17	0.1
Program Consultant	16	0.1
Analyst	15	0.1
Medical Library Technician	15	0.1
Other with < 10 employees (76 job titles)	370	1.2
Total	28,436	100.0

Appendix D: Top 36 Job Titles in Survey Data

Job Title	Frequency	Percent
Lab Technologist	159	8.9
Lab Assistant	130	7.3
Primary Care Paramedic	113	6.3
Social Worker	111	6.2
Occupational Therapist	110	6.2
Respiratory Therapist	86	4.8
Advanced Care Paramedic	85	4.8
Medical Radiation Technologist	71	4
Physiotherapist	66	3.7
Pharmacist	63	3.5
Pharmacy Technician	60	3.4
Speech Language Pathologist	53	3
Mental Health Therapist	52	2.9
Therapy Assistant	52	2.9
Addictions Counsellor	48	2.7
Recreational Therapist	39	2.2
Dietitian	35	2
Combined Lab and X-Ray Technologist	28	1.6
Health Information Management Professional	27	1.5
Psychologist	26	1.5
Family Counsellor	25	1.4
Administrative Support	20	1.1
Physical Therapist	20	1.1
Public Health Inspector	17	1
Cardiology Technologist	13	0.7
Diagnostic Sonographer	12	0.7
Mental Health Clinician	12	0.7
Health Promotion Facilitator	11	0.6
Nuclear Medicine Technologist	11	0.6
Clinical Supervisor	10	0.6
Emergency Communications Officer	10	0.6

Radiation Therapist	9	0.5
Biomedical Equipment Technologist	8	0.4
Psychometrist	7	0.4
Dental Hygienist	6	0.3
Infection Control Practitioner	6	0.3
Other containing < 5 responses (58 job titles)	135	7.6
Missing	42	2.3
Total	1,746	100.0

4-50 Arts and Convocation Hall
University of Alberta
Edmonton AB | T6G 2E6
Phone: 780.492.8558
Email: parkland@ualberta.ca
Website: www.parklandinstitute.ca

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