HEALTH SCIENCES ASSOCIATION
The union delivering modern health care

@hsabc
info@hsabc.org
www.hsabc.org

THE TIPPING POINT: SHORTAGE OF HEALTH SCIENCE PROFESSIONALS IN PUBLIC HEALTH CARE

For years, British Columbia's health care system has struggled with shortages of Health Science Professionals (HSP) in the public sector.

Many British Columbians have never heard of these professions, nor could they describe the critical role they play in our public health care system. Despite this lack of public awareness, health care would not function without them.

It is not just doctors and nurses who save lives and care for British Columbians; it takes a whole team of health care professionals.

Health science professions include Physiotherapists, Respiratory Therapists, Diagnostic Medical Ultrasonographers, Medical Laboratory Technologists, Medical Imaging Technologists, and many more. In fact, there are over 70 specialized professions that are critical to the success of our public health care system – from prevention to diagnosis to treatment and rehabilitation - ensuring robust and reliable care for patients across British Columbia.

The specific reasons for shortages in these professions vary, but generally arise from recruitment and retention challenges ignored for more than a decade, including lack of provincial post-secondary training capacity, competition with the private sector, heavy workload, and professional burnout. It will come as no surprise that these challenges have been made worse by the COVID-19 pandemic.

The health care system has managed under these shortages for many years, but the situation has reached a tipping point and needs immediate attention:

- COVID testing in BC is limited by the severe shortage of Medical Laboratory Technologists.
- Current Health Science Professionals are burning out due to heavy workload and excessive overtime demands, accelerating the shortage problem.
- Other provinces are attracting BC Health Science Professionals with higher wages and signing bonuses.
- The private sector is luring away physiotherapists and other professionals with higher wages and more manageable caseloads.
- Ongoing work to reduce diagnostic and surgical wait times in BC is jeopardized by these shortages.

HEALTH SCIENCE PROFESSIONALS REPRESENT THE MAJORITY OF PROFESSIONS IN SHORTAGE IN HEALTH CARE

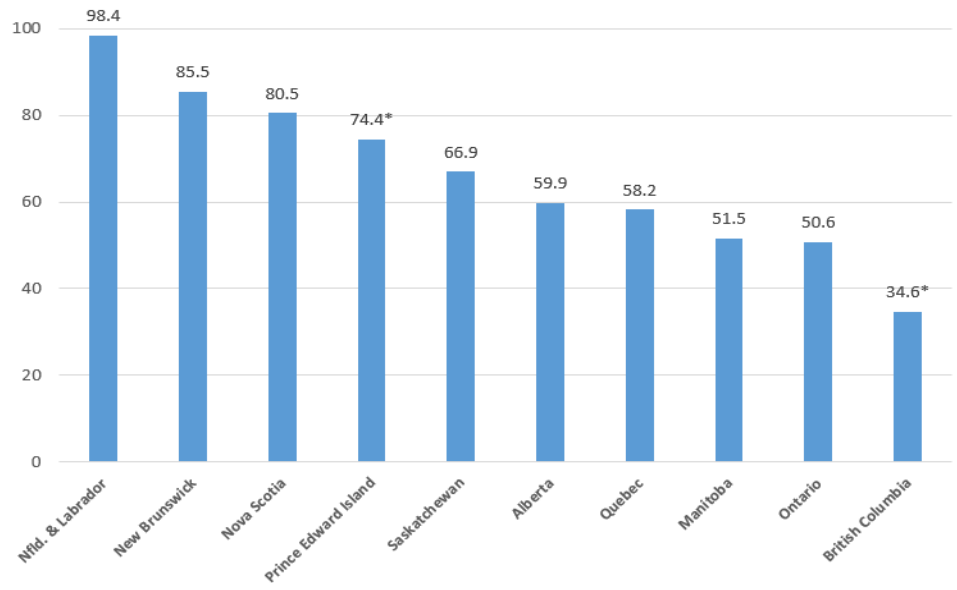
The BC Ministry of Health's Provincial Health Workforce Strategy 2018/19 – 2020/21 (see table at end of document) indicates that the majority of current and future priority professions with labour market challenges are in Health Sciences.

Because of unfilled vacancies and low staffing levels, many departments rely on overtime to deliver necessary services. For example, one respiratory therapy department in an acute care hospital can only manage demand using upwards of *1,800 to 2,000 hours of overtime each month* – and yet that department has vacancies that have remained unfilled for more than a year.

Based on available health authority data, unfilled vacancies for Occupational Therapists and Physiotherapists each increased by roughly 125% between 2014 and 2019.

Medical Laboratory Technologists are skilled professionals necessary for delivering COVID-19 test results, among other critical diagnostic tests. Yet, BC has the lowest number of Medical Laboratory Technologists per capita among the provinces. In 2019, BC had 35 MLTs per 100,000 people, significantly below all the provinces and the second-lowest, Ontario, with 51 per 100,000 people (Figure 1).

Figure 1: Medical laboratory technologists per 100,000 population, 2019



Source: Health Workforce Database, Canadian Institute for Health Information; Statistics Canada, Demography Division.
*Counts may be understated due to the non-regulatory status of the profession as of 2019. Please use with caution.

BC also faces a shortage of Respiratory Therapists, who are essential to caring for patients with COVID-19 and other cardio-respiratory conditions. Respiratory Therapists are specialized professionals who work with ICU teams to intubate patients, and they also play a vital role in hospital and outpatient settings in the areas of ventilator management, non-invasive ventilation therapies, respiratory assessments, management of patient oxygen needs, airway management, and patient education and self-management that supports discharge.

Alarmingly, BC has the fewest Respiratory Therapists per capita among the provinces (Figure 2). In fact, the number of Respiratory Therapists per capita declined between 2015 and 2019. BC was one of only two provinces to experience a decline in that period.

Figure 2: Respiratory therapists per 100,000 population, 2015 to 2019

	2015		2019		2019 rank per 100k	Change in RTs per 100k, 2015 to 2019
	Count	Number per 100,000	Count	Number per 100,000		
NB	369	48.6	429	55.7	1	14%
QC	4,143	50.7	4,404	52.5	2	4%
AB	1,677	40.5	1,895	44.0	3	9%
NS	289	30.9	346	36.0	4	17%
NL	141	26.7	162	30.8	5	15%
MB	328	25.0	331	24.5	6	-2%
ON	3,152	23.0	3,446	24.1	7	5%
SK	223	19.9	256	22.0	8	11%
PEI	25*	17.3*	31*	20.2*	9	17%
BC	950*	19.9*	979*	19.6*	10	-1%

Source: Canadian Institute for Health Information (2020), Canada's Health Care Providers, 2015 to 2019 (data tables).

Note: 2015 data for MB are unavailable and 2016 data have been used instead.

* Counts may be understated due to the non-regulatory status of the profession as of 2019. Use with caution.

The current shortage of Health Science Professionals is taking a toll. A 2021 survey of HSA members had some startling results: 57% said their department already has a patient waitlist; 76% reported shortages in their profession; and 82% are worried about patient care due to workload. Also notable: 70% said the pandemic has had a negative effect on their mental health.

Most concerning, 41% said they are considering leaving public practice due to unmanageable workload.

The current workload and stress on Health Science Professionals is not sustainable in the immediate, medium, or long term – either economically or in terms of human resources. It is expensive and causes burnout of the limited professionals we have.

Former governments ignored this growing crisis for decades, and we have now reached the tipping point.

SOME PROGRESS, BUT MORE GOVERNMENT ACTION IS REQUIRED

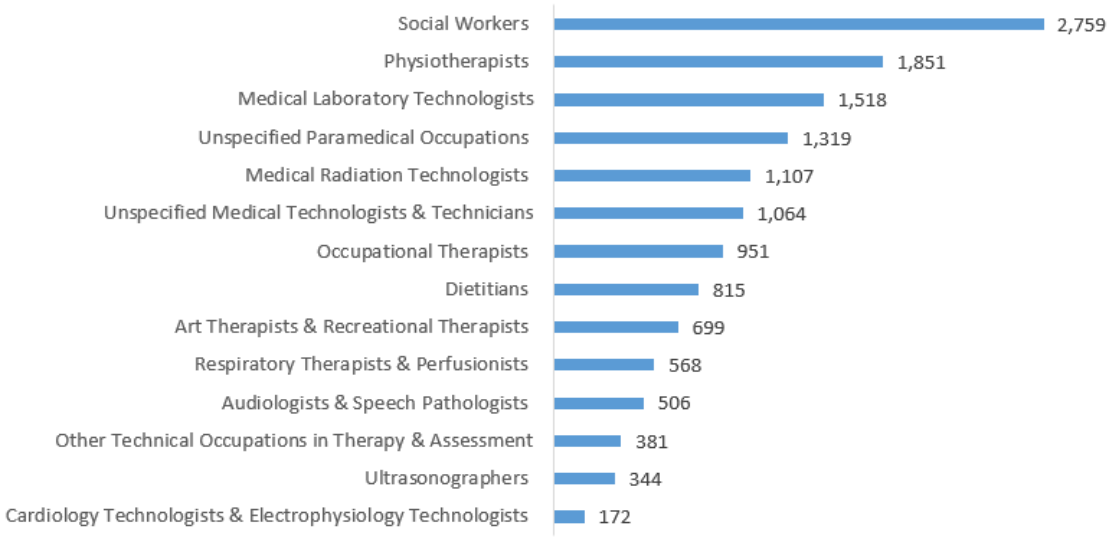
Many Health Science Professions are designated WorkBC High Opportunity Occupations, with thousands of job openings to be filled by 2029 (Figure 3). The vacancies are likely to increase as demand for health care increases as a result of COVID-19.

In 2019 government took some encouraging steps towards creating new training opportunities for Health Science Professionals, including 40 new first-year Physiotherapy and 24 Occupational Therapy training seats across the province;[1] and new Diagnostic Medical Ultrasonography training programs at College of New Caledonia in Prince George and at Camosun College on Vancouver Island.[2]

1 Ministry of Advanced Education, Skills and Training, Occupational and physical therapy seats coming to Northern BC, May 24, 2019. There are currently 80 first-year physiotherapy seats in BC. This will increase to 120 first-year spaces, with full expansion expected by September 2022. The First 20 seats will be at UBC Vancouver, followed by Fraser Valley. The most recent increase was in 2008. In occupational therapy, there are 48 first-year seats in BC. This will increase to 72 first-year seats with the first eight at UBC Vancouver (Sep. 2020) and 16 through a joint UBC/UNBC initiative (Sep. 2022). The most-recent increase was in 2009.

2 Ministry of Advanced Education, Skills and Training, Northern B.C.'s First Sonography Program Gets Underway, Jan. 28, 2019; Ministry of Advanced Education, Skills and Training, First sonography program coming to Vancouver Island, October 17, 2019.

Figure 3: WorkBC Job Openings, 2019 to 2029.



These are important steps, but we need to immediately increase post-secondary training opportunities for critical Health Science Professions facing severe shortages to ensure we have the specialized professionals needed to sustain our public health care system

Budget 2021 provided $96 million in new funding over three years to support expansion of post-secondary training capacity for nurses and health science professionals. Although details of the post-secondary seat expansion are not yet available, without significant commitment to expansion of training for health science professions, no headway will be made in the medium and long term on addressing the shortages.

In addition, the BC government continues to build its workforce planning expertise through the creation of the Allied Health Policy Secretariat in the Ministry of Health, which recently completed the first-ever survey of the allied health workforce. We applaud the Ministry for engaging frontline professionals about severe shortages, heavy workload, and lack of career advancement and leadership opportunities. We now need action on those findings.

However, increased training alone will not be enough. We must be thinking about innovative incentives to bring new graduates into public health care, and strategies to maintain and increase existing staffing levels.

One of the most profound challenges is that many Health Science Professionals can earn more and carry lighter workloads in the private sector.

This is a real threat to our public health care system. For example, in 2019 BC had the smallest share – 33%– of Physiotherapists working in the public sector among the provinces with available data (Table 4). More concerning is that over time, a smaller and smaller share of total Physiotherapists in BC are working in the public sector. According to the Canadian Institute for Health Information, between 2010 and 2019, the share of Physiotherapists in the public sector declined from 48% to 33%.

This indicates the significant competition we face with the private sector in BC for trained health professionals.

Table 4: Percentage of Physiotherapy Workforce by Sector of Employment, 2019

	% in public sector	% in private sector
Saskatchewan	53%	44%
Newfoundland and Labrador	52%	48%
Manitoba	48%	48%
Alberta	47%	52%
New Brunswick	42%	56%
British Columbia	33%	64%

Source: CIHI, 2020

Note: Provinces with available data are included. Percentages may not sum to 100% as some data do not specify sector. Private sector includes self-employed.

In the short- to medium-term we urge the government to consider a range of recruitment and retention strategies to address this crisis.

These include signing bonuses to recruit professionals currently not practicing in the public system or from other jurisdictions; student loan forgiveness for new graduates who commit to working in public health; travel and relocation expense reimbursements (as many vacancies are in rural and remote communities); and housing stipends.

It is also important to recognise that BC lags behind other provinces when it comes to wages for Health Science Professionals (Table 5). BC is often in the middle or at the bottom of the pack in terms of compensation, especially compared with neighbouring Alberta. We also know that while many young professionals may train in BC, they quickly relocate to other provinces due to the lower cost of living and higher pay.

Table 5: Selected BC health science professions by wage gap with Alberta

	BC Public Sector (Grade I, 6th practice year)	Wage Gap with Alberta	Wage Gap with Alberta (%)
Speech-Language Pathologist	$44.45	($10.80)	-24.30%
Respiratory Therapist	$38.46	($8.84)	-22.98%
Medical Laboratory Technologist	$38.53	($6.22)	-16.14%
MRI Technologist	$41.50	($6.25)	-15.06%
Anesthesia Assistant	$44.45	($6.19)	-13.93%
Occupational Therapist	$44.68	($4.97)	-11.12%
Physiotherapist	$44.68	($4.97)	-11.12%

We encourage government to consider targeted Labour Market Adjustments for priority professions to ensure BC is competitive and able to attract needed Health Science Professionals.

If our public health care system is to be successful in the ongoing battle against COVID-19 and keeping up with demand for surgeries, diagnostic and rehabilitative services, it will depend on bold and immediate action to address these shortages. HSA is committed to working with government and employers to address the growing professional staffing crisis.

CONCLUSION

Our public health care system is under extreme demand, and the COVID-19 pandemic has put these pressures under a spotlight. Health care professionals are under severe pressure and experiencing mental health issues and burnout at record rates. For Health Science Professionals this current pressure is heightened due to existing shortages in their field.

Investment in Health Science Professionals – not just doctors and nurses – is required.

Jobs in the health science professions are key to our public health care system, but also can play a critical role in our post-pandemic economic recovery. Investing in the health care and social services workforce makes solid economic sense. These are good jobs that support families and communities. And, most importantly, they serve an urgent need in our province.

RECOMMENDATIONS

1. Implement targeted recruitment and retention measures in order to address the public-sector shortage of Health Science Professionals, including more clinical leadership opportunities, increased post-secondary training opportunities, incentives to attract graduates and those in private practice into public practice, and competitive wages with other provinces and the private sector.

2. Increase Ministry of Advanced Education funding to train more Health Science Professionals who face public-sector shortages, including: Physiotherapists, Occupational Therapists, Speech-Language Pathologists, Diagnostic Medical Sonographers, MRI Technologists, Medical Laboratory Technologists, Respiratory Therapists, Anesthesia Assistants, and Perfusionists.

Ministry of Health's Provincial Health Workforce Strategy 2018/19 – 2020/21

Strategic Priority Areas	Priority Professions for 2018/2019	Future Priority Professions
I. Primary Care Services	Nurse Practitioner	Registered Nurse
	Family Physician	Psychologist
	Licensed Practical Nurse (LPN)	Social Worker
	Occupational Therapist (OT)	
	Physiotherapist	
II. Adults with Complex Medical Conditions and /or Frailty	Health Care Assistant (HCA)	Registered Nurse
	Licensed Practical Nurse (LPN)	Rehabilitation Assistant
	Occupational Therapist (OT)	Dietitian
	Physiotherapist	Social Worker
		Medical Specialist
III. Surgical and Diagnostic Services	Nurse (LPN and RN)	Anesthesiologist and GP Anesthesiologist
	Nurse Practitioner	Anesthesia Assistant
	Physiotherapist	Case Manager
	Perfusionist	Surgeon & GP with enhanced surgical skills
		Dietitian
		Counsellor
		Home Nursing Support
		Surgical Services Team
		Clinical Surgical Subspecialists
IV. Mental Health and Substance Use	Psychiatrist	Psychologist
	Registered Psychiatric Nurse	Social Worker
	Occupational Therapist (OT)	Clinical Counsellor
	Family Physician	Trained Peer Support
	Nurse Practitioner	Pharmacist
	Physiotherapist	Dietitian
		Naturopathic Medicine
		Recreation Therapist
		Music and Art Therapists
		Spiritual Services
		Traditional Chinese Medicine and Acupuncturist
		Cross-Cultural Liaison
		Vocational Expert
		Expert in Public Health
		Expert in Psychosocial Rehabilitation