

2024 Saskatchewan Health Human Resource (HHR) Forecast Model

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saskatchewan.ca

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SECTION 1: FORECAST AT A GLANCE

Figure 1: Forecast Overview

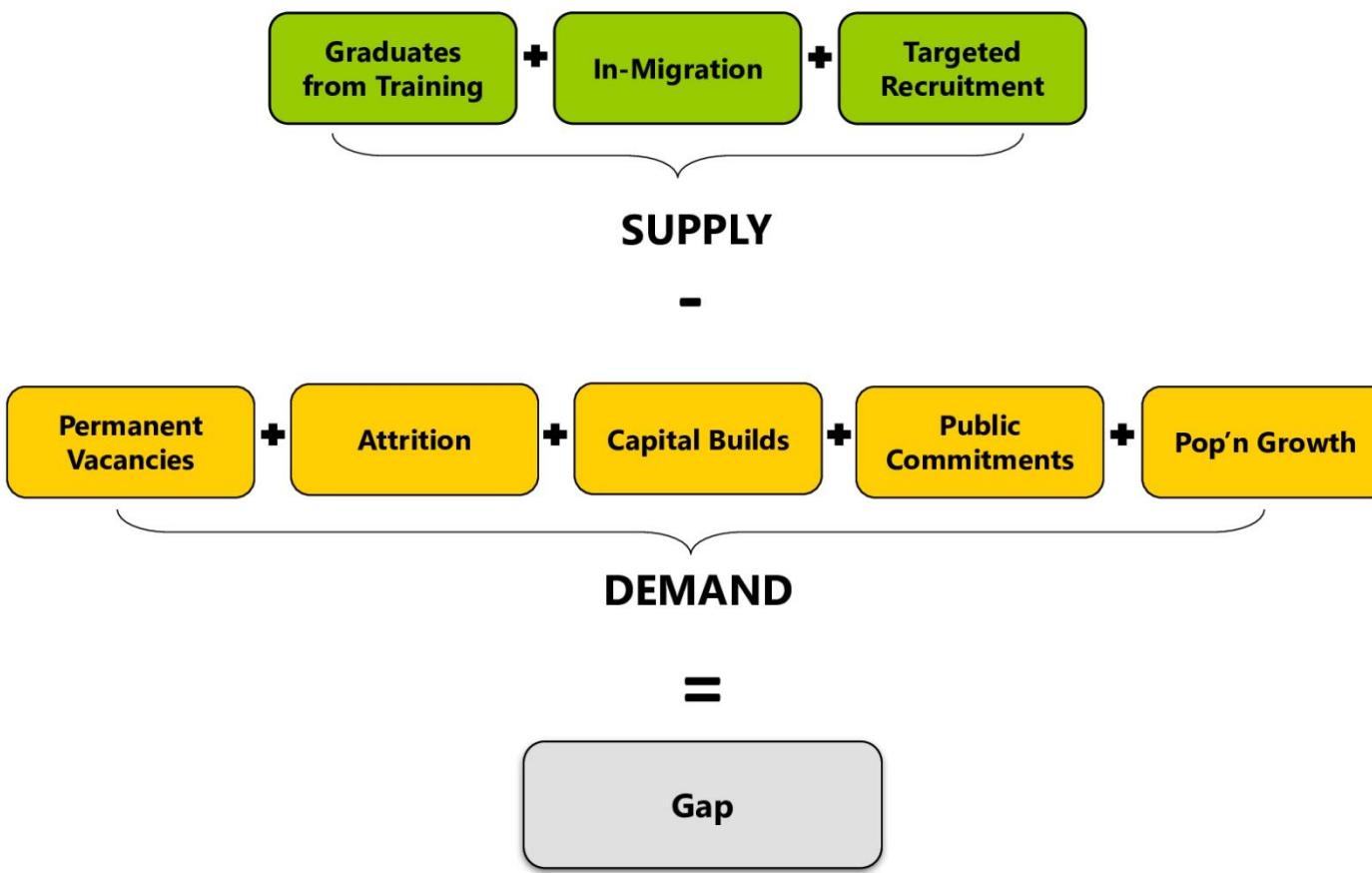


Figure 2: Prioritization Overview

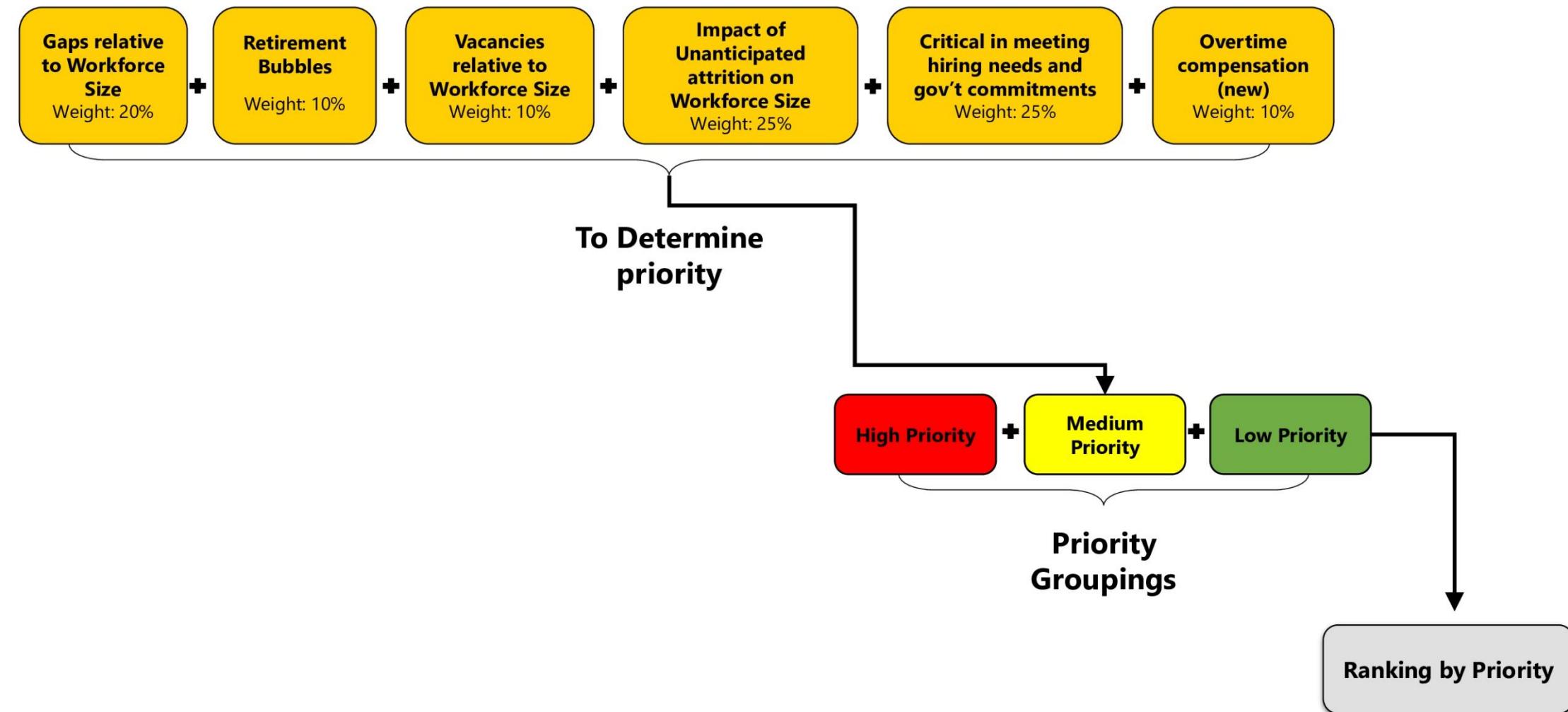


Table 1: Projected Annual Gaps & Priorities by Occupation, 2024-25 to 2028-29

Priority	Occupation	Gap in 2024-25	Gap in 2025-26	Gap in 2026-27	Gap in 2027-28	Gap in 2028-29
High	Perfusionists	-2	-2	-2	-1	-1
	Medical Physicists	-5	-6	-6	-7	-7
	Anaesthesia Assistants	-7	-8	-8	-9	-10
	Diagnostic Cardiac Sonographers	-13	-13	-14	-9	-4
	Cardiopulmonary Function Technologists	-1	-2	-2	-2	-3
	Magnetic Resonance Imaging Technologists	-23	-19	-15	-10	-6
	Psychologists	-86	-91	-96	-99	-100
	Radiation Therapists	-9	-12	-13	-15	-16
	Electro-Neurophysiology Technologists	-11	-10	-9	-9	-8
	Nurse Practitioners	-30	5	30	31	31
Medium	Cardiology Technologists	-15	-18	-18	-17	-17
	Cardiovascular Technologists	-5	-6	-7	-8	-9
	Occupational Therapists	-45	-31	-17	-8	38
	Medical Radiation Technologists	-60	-56	-46	-48	-24
	Respiratory Therapists	-13	-20	-25	-27	-27
	Registered Nurses/Registered Psychiatric Nurses	-743	-509	-277	-203	186
	Clinical Genetics Technologists	-2	-2	-3	-3	-4
	Medical Laboratory Technologists	-59	-52	-46	-38	-10
	Nutritionists	-3	-5	-7	-9	-10
	Health Records Clerks	-40	-48	-56	-64	-72
	Recreation Therapists	-22	-4	8	22	18
	Public Health Inspectors	-17	-23	-29	-36	-42
Low	Dosimetrists	-2	-3	-3	-4	-5
	Licensed Practical Nurses	-116	71	196	26	201
	Medical Laboratory Assistants	-29	-30	-33	-41	-52
	Continuing Care Assistants	-671	-663	-634	-1310	-1264
	Diagnostic Medical Sonographers	-17	-20	-18	-10	0
	Speech Language Pathologists	-40	-19	7	29	66
	Advanced Care Paramedics	-25	-24	-24	-25	-25
	Audiologists	-3	-1	0	1	2
	Nuclear Medicine Technologists	-6	-6	-5	-4	-2
	Health Information Management Practitioners	-21	-25	-26	-29	-30
	Pharmacy Technicians	-27	-19	-1	10	10
	Combined Lab & X-Ray Technicians	3	19	14	12	13
	Physical Therapists	-44	-15	13	16	22
	Health Cooks	-123	-137	-148	-161	-172
	Mental Health Therapists	4	28	32	32	32
	Primary Care Paramedics	-17	119	137	135	136
	Addictions Counsellors	-44	58	103	102	103
	Social Workers	19	130	148	143	146
	Pharmacists	18	46	44	28	40
	Dietitians	1	8	8	3	4

SECTION 2: OCCUPATIONAL PROFILES

Profile 1: Addictions Counsellors



Addictions Counsellors

Unregulated

Support individuals with substance use and/or substance use related mental health issues. Addictions counsellors assess an individual's needs and develop a treatment plan which may include developing a safety plan, short term counselling and/or referrals to longer term resources.



786

Payroll (Public) 456 (58%)
Non-payroll (Private) 330 (42%)

Estimated Headcounts (as of March 31, 2024)



N/A

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)



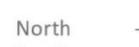
16

Permanent	North	6 (38%)
Temporary	South	4 (25%)
	Regina	2 (13%)
	Saskatoon	4 (25%)
13		
3		

SHA & Affiliate Vacancies (as of April 1, 2024)



Permanent Temporary



Permanent Temporary

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ³	Share ³	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	76	100%	132	100%	132	100%	132	100%	132	100%
Grads from Interprovincial Training Programs	-	-	-	-	-	-	-	-	-	-
In-migrated Health Professionals ¹	0	-	0	-	0	-	0	-	0	-
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	76		132		132		132		132	
Demand Components										
Vacancies ²	13	11%	44	59%	0	-	0	-	0	-
Capital Projects	0	-	0	-	0	-	0	-	0	-
Attrition (Resignations, Retirements and Other Terminations)	22	18%	21	28%	21	75%	21	72%	21	72%
Population Growth	3	<1%	9	12%	7	25%	8	28%	8	28%
New Public Commitments	83	69%	0	-	0	-	0	-	0	-
Total Forecasted Demand	120		74		28		29		29	

Estimated Gap

-44 58 103 102 103

¹ Occupation is not regulated.

² Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³ Proportions may not add up to 100 and count may not sum up to totals due to rounding.

LOW PRIORITY

Training Program Entry Prerequisites:

- Direct entry from high school.

Training Program Length (Credential Type):

- 80 weeks (Diploma)

Labour Force Attachment Rate:

- 86%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
Saskatchewan Polytechnic (Online)	51	71%
Regional Colleges	146	84%
Northlands College (Air Ronge, Buffalo Narrows) Saskatchewan Indian Institute of Technology (Mosquito Grizzly Bear's Head Lean Man First Nations, Prince Albert, Regina, Saskatoon, Yorkton)		
Total	197	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.18

Other Labour Force Considerations:

- Students in their final clinical placements are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon.
- 70 addictions counsellor FTEs are required in the 2024-25 fiscal year to support mental health and addictions initiatives.
- 16 seats were added at Saskatchewan Polytechnic as part of the 550 seat expansions announced in January 2023.

Profile 2: Advanced Care Paramedics



Advanced Care Paramedics

Regulated – Saskatchewan College of Paramedics

LOW PRIORITY

Provide advanced life support to patients with neurological, immune and endocrine system illnesses as well as those exposed to adverse environments. Advanced Care Paramedics can also perform many complex assessments and medical interventions, including the administration of many medications.



400

Payroll (Public) 163 (41%)
Non-payroll (Private) 237 (59%)

Estimated Headcounts (as of March 31, 2024)

\$841K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

15
Permanent **Temporary**
15 -

North 3 (20%)
South 7 (47%)
Regina 5 (33%)
Saskatoon 0

SHA & Affiliate Vacancies (as of April 1, 2024)

-
Permanent **Temporary**
- -

North -
South -
Regina -
Saskatoon -

SCA Vacancies (as of April 1, 2024)

	2024-25		2025-26		2026-27		2027-28		2028-29	
Supply Components	Count ³	Share ³	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	6	23%	9	100%	7	100%	7	100%	7	100%
Grads from Interprovincial Training Programs	-	-	-	-	-	-	-	-	-	-
In-migrated Health Professionals ²	0	-	0	-	0	-	0	-	0	-
Targeted Recruitment Initiatives	20	77%	0	-	0	-	0	-	0	-
Total Forecasted Supply	26		9		7		7		7	
Demand Components										
Vacancies ²	15	29%	25	76%	24	77%	24	75%	25	75%
Capital Projects	0	-	0	-	0	-	0	-	0	-
Attrition (Resignations, Retirements and Other Terminations)	5	10%	5	15%	5	16%	5	16%	5	16%
Population Growth	18	35%	3	9%	3	10%	3	9%	3	9%
New Public Commitments	13	25%	0	-	0	-	0	-	0	-
Total Forecasted Demand	51		33		31		32		32	
Estimated Gap	-25		-24		-24		-25		-25	

¹Data is not available from the regulator.

²Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³Proportions may not add up to 100 and count may not sum up to totals due to rounding.

Training Program Entry Prerequisites:

- Primary Care Paramedic certification from an accredited program or equivalent.
- Registered as a PCP of the 2011 National Occupational Competency Profile for Paramedics training (Paramedic Association of Canada, 2011).

Training Program Length (Credential Type):

- 71 weeks (Diploma)

Labour Force Attachment Rate:

- 89%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
Saskatchewan Polytechnic (Regina, Saskatoon)	32	39%
Total	32	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 0.93

Other Labour Force Considerations:

- Students in their final clinical placements are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon.
- Medavie recruited 29 advanced care paramedics from Australia during a mission in September 2023. The Ministry of Health supported the Saskatchewan College of Paramedics (SCOP) with a \$10K grant to assist with the licensing and assessment of the international paramedics.
- In 2024-25, 14.4 Advanced Care Paramedics FTEs are needed to support public commitments including emergency medical services (EMS) stabilization and enhancements and Saskatoon EMS and community paramedicine resources.

Profile 3: Anaesthesia Assistants



Anaesthesia Assistants

Regulated – Saskatchewan College of Respiratory Therapists

Take patient histories, perform physical exams, administer necessary lab tests, prepare the patient to be monitored as directed by the physician, assist with preparatory procedures, and insert venous, arterial, and other invasive catheters. They also test anesthesia equipment, maintain anesthesia levels, airway management including intubation, work with intensive care units and pain clinics, and prepare case summaries.



25
Payroll (Public) 21 (84%)
Non-payroll (Private) 4 (16%)

Estimated Headcounts (as of March 31, 2024)



\$72K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)



4	North	0 (0%)
	South	0 (0%)
Permanent	Regina	2 (50%)
Temporary	Saskatoon	2 (50%)
4	-	-



Permanent	North	-
Temporary	South	-
	Regina	-
	Saskatoon	-
-	-	-

SHA & Affiliate Vacancies (as of April 1, 2024)

SCA Vacancies (as of April 1, 2024)

	2024-25		2025-26		2026-27		2027-28		2028-29	
Supply Components	Count ³	Share ³	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	0	-	0	-	0	-	0	-	0	-
Grads from Interprovincial Training Programs	-	-	-	-	-	-	-	-	-	-
In-migrated Health Professionals ²	0	-	0	-	0	-	0	-	0	-
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	0		0		0		0		0	
Demand Components										
Vacancies ²	4	57%	7	88%	8	100%	8	89%	9	90%
Capital Projects	0	-	0	-	0	-	0	-	0	-
Attrition (Resignations, Retirements and Other Terminations)	0	-	0	-	0	-	0	-	0	-
Population Growth	0	-	0	-	0	-	0	-	0	-
New Public Commitments	3	43%	0	-	0	-	0	-	0	-
Total Forecasted Demand	7		8		8		9		10	
Estimated Gap	-7		-8		-8		-9		-10	

¹Data is not available from the regulator.

²Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³Proportions may not add up to 100 and count may not sum up to totals due to rounding.

HIGH PRIORITY

Training Program Entry Prerequisites:

- N/A

Training Program Length (Credential Type):

- N/A

Labour Force Attachment Rate:

- N/A

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
N/A	N/A	N/A
Total		

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.16

Other Labour Force Considerations:

- In 2024-25, 2.7 Anaesthesia Assistants FTEs are needed to support public commitments including intensive and acute care initiatives.
- A minimum of 2 years of work experience as a respiratory therapist is required to become an anesthesia assistant. Consequently, the anesthesia assistant occupation draws from the respiratory therapist workforce.

Profile 4: Audiologists



Audiologists

Regulated – College of Speech-Language Pathologists and Audiologists of Saskatchewan

LOW PRIORITY

Diagnose, manage, and (re)habilitate hearing, balance, or ear problems and related conditions. They determine the severity and type of hearing loss a patient has and develop a plan for treatment. Audiologists work in a variety of settings and provide service for all ages.



43

Payroll (Public) 11 (26%)
Non-payroll (Private) 32 (74%)

Estimated Headcounts (as of March 31, 2024)



\$9K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)



2

Permanent 2
Temporary -

North	0 (0%)
South	0 (0%)
Regina	0 (0%)
Saskatoon	2 (100%)



Permanent Temporary

North	-
South	-
Regina	-
Saskatoon	-

SHA & Affiliate Vacancies (as of April 1, 2024)

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ²	Share ²	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	0	-	0	-	0	-	0	-	0	-
Grads from Interprovincial Training Programs	-	-	-	-	-	-	-	-	-	-
In-migrated Health Professionals	5	100%	5	100%	4	100%	4	100%	4	100%
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	5		5		4		4		4	
Demand Components										
Vacancies ¹	2	22%	3	43%	1	25%	0	-	0	-
Capital Projects	0	-	0	-	0	-	0	-	0	-
Attrition (Resignations, Retirements and Other Terminations)	3	33%	3	43%	2	50%	2	67%	2	100%
Population Growth	1	11%	1	14%	1	25%	1	33%	1	50%
New Public Commitments	2	22%	0	-	0	-	0	-	0	-
Total Forecasted Demand	9		7		4		3		2	
Estimated Gap	-3		-1		0		1		2	

¹ Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

² Proportions may not add up to 100 and count may not sum up to totals due to rounding.

Training Program Entry Prerequisites:

- N/A

Training Program Length (Credential Type):

- N/A

Labour Force Attachment Rate:

- N/A

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
N/A	N/A	N/A
Total		

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.03

Other Labour Force Considerations:

- In 2024-25, 2.4 Audiologists FTEs are needed to support public commitments to improve intensive and acute care.



Cardiology Technologists

Unregulated

Perform a variety of diagnostic procedures to assist physicians in the diagnosis of electrophysiological and mechanical function of the heart.



87

Payroll (Public) 87 (100%)
Non-payroll (Private) 0 (0%)

Estimated Headcounts (as of March 31, 2024)

\$449K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	4	North 0 (0%)
Permanent	Temporary	South 1 (25%)
4	-	Regina 2 (50%)
		Saskatoon 1 (25%)

SHA & Affiliate Vacancies (as of April 1, 2024)

	-	North -
Permanent	Temporary	South -
-	-	Regina -
		Saskatoon -

SCA Vacancies (as of April 1, 2024)

	2024-25		2025-26		2026-27		2027-28		2028-29	
Supply Components	Count ³	Share ³	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	-	-	-	-	-	-	-	-	-	-
Grads from Interprovincial Training Programs	0	-	0	-	4	100%	4	100%	4	100%
In-migrated Health Professionals ¹	0	-	0	-	0	-	0	-	0	-
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	0		0		4		4		4	
Demand Components										
Vacancies ²	4	27%	15	83%	18	86%	18	85%	17	81%
Capital Projects	0	-	0	-	0	-	0	-	0	-
Attrition (Resignations, Retirements and Other Terminations)	2	13%	2	11%	2	10%	2	10%	2	10%
Population Growth	0	-	1	6%	1	5%	1	5%	1	5%
New Public Commitments	8	53%	0	-	0	-	0	-	0	-
Total Forecasted Demand	15		18		21		21		21	
Estimated Gap										
	-15		-18		-18		-17		-17	

¹Occupation is not regulated.

²Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³Proportions may not add up to 100 and count may not sum up to totals due to rounding.

MEDIUM PRIORITY

Training Program Entry Prerequisites:

- Direct entry from high school.

Training Program Length (Credential Type):

- 2 years (Diploma)

Labour Force Attachment Rate:

- 75%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
British Columbia Institute of Technology (Vancouver)	5	100%
Total	5	

Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.33

Other Labour Force Considerations:

- Students in their final clinical placements are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon.
- In 2024-25, 6.3 Cardiology Technologists FTEs are needed to support public commitments.
- 5 training seats will be secured at the British Columbia Institute of Technology in the 2024-25 academic year.
- Cardiology technologists are certified with the Canadian Society of Cardiology Technologists and registered with the Saskatchewan Cardiology Technologists Association.



Cardiopulmonary Function Technologists

Unregulated

Perform diagnostic physiological tests to aid physicians in the diagnosis, evaluation and management of respiratory dysfunction.



8
Payroll (Public) 8 (100%)
Non-payroll (Private) 0 (0%)

Estimated Headcounts (as of March 31, 2024)

\$832

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	Permanent	Temporary	North	South	Regina	Saskatoon
	1	-	0 (0%)	0 (0%)	0 (0%)	1 (100%)
	-	-	North	South	Regina	Saskatoon
	-	-	-	-	-	-
	-	-	-	-	-	-

SHA & Affiliate Vacancies (as of April 1, 2024)

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ³	Share ³	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	0	-	0	-	0	-	0	-	0	-
Grads from Interprovincial Training Programs	-	-	-	-	-	-	-	-	-	-
In-migrated Health Professionals ¹	0	-	0	-	0	-	0	-	0	-
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	0		0		0		0		0	
Demand Components										
Vacancies ²	1	100%	1	50%	2	100%	2	100%	2	67%
Capital Projects	0	0%	0	0%	0	0%	0	0%	0	0%
Attrition (Resignations, Retirements and Other Terminations)	0	0%	0	0%	0	0%	0	0%	0	0%
Population Growth	0	0%	0	0%	0	0%	0	0%	0	0%
New Public Commitments	0	0%	0	0%	0	0%	0	0%	0	0%
Total Forecasted Demand	1		2		2		2		3	
Estimated Gap										
	-1		-2		-2		-2		-3	

¹ Occupation is not regulated.

² Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³ Proportions may not add up to 100 and count may not sum up to totals due to rounding.

HIGH PRIORITY

Training Program Entry Prerequisites:

- N/A

Training Program Length (Credential Type):

- N/A

Labour Force Attachment Rate:

- N/A

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
N/A	N/A	N/A
Total		

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.04

Other Labour Force Considerations:

- Cardiopulmonary function technologists are registered with the Canadian Association of Cardiopulmonary Technologists (CACPT).

Profile 7: Cardiovascular Technologists



Cardiovascular Technologists

Unregulated

Assist cardiologists/cardiovascular surgeons in diagnostic and interventional procedures, which may be performed on neonates, children and adults. They may also be responsible for performing pacemaker duties.



48

Payroll (Public) 48 (100%)
Non-payroll (Private) 0 (0%)

Estimated Headcounts (as of March 31, 2024)

\$44K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	North	South	Regina	Saskatoon	Permanent	Temporary
					1	2
Permanent	0 (0%)	-	-	-	-	-
Temporary	0 (0%)	-	-	-	-	-
	0 (0%)	-	-	-	-	-
	3 (100%)	-	-	-	-	-

SHA & Affiliate Vacancies (as of April 1, 2024)

	North	South	Regina	Saskatoon	Permanent	Temporary
					1	2
Permanent	-	-	-	-	-	-
Temporary	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-

SCA Vacancies (as of April 1, 2024)

	2024-25		2025-26		2026-27		2027-28		2028-29	
Supply Components	Count ³	Share ³	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	0	-	0	-	0	-	0	-	0	-
Grads from Interprovincial Training Programs	-	-	-	-	-	-	-	-	-	-
In-migrated Health Professionals ²	0	-	0	-	0	-	0	-	0	-
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	0		0		0		0		0	
Demand Components										
Vacancies ²	1	20%	5	83%	6	86%	7	88%	8	89%
Capital Projects	0	-	0	-	0	-	0	-	0	-
Attrition (Resignations, Retirements and Other Terminations)	1	20%	1	17%	1	14%	1	13%	1	11%
Population Growth	0	-	0	-	0	-	0	-	0	-
New Public Commitments	4	80%	0	-	0	-	0	-	0	-
Total Forecasted Demand	5		6		7		8		9	
Estimated Gap										
	-5		-6		-7		-8		-9	

¹ Occupation is not regulated.

² Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³ Proportions may not add up to 100 and count may not sum up to totals due to rounding.

MEDIUM PRIORITY

Training Program Entry Prerequisites:

- N/A

Training Program Length (Credential Type):

- N/A

Labour Force Attachment Rate:

- N/A

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
N/A	N/A	N/A
Total		

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 0.97

Other Labour Force Considerations:

- In 2024-25, 3.7 Cardiovascular Technologists FTEs are needed to support public commitments to improve specialized cardiosciences services.

- Cardiovascular technologists are registered with the Canadian Association of Cardiopulmonary Technologists (CACPT).

Profile 8: Clinical Genetics Technologists



Clinical Genetics Technologists

Regulated - Saskatchewan Society of Medical Laboratory Technologists

Responsible for performing diagnostic chromosome and molecular studies on peripheral blood, bone marrow, amniotic fluid and solid tissue samples.



Payroll (Public) 10 (100%)
Non-payroll (Private) 0 (0%)

Estimated Headcounts (as of March 31, 2024)



\$7K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)



North	0 (0%)
South	0 (0%)
Regina	0 (0%)
Saskatoon	1 (100%)



SHA & Affiliate Vacancies (as of April 1, 2024)

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ³	Share ³	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	0	-	0	-	0	-	0	-	0	-
Grads from Interprovincial Training Programs	-	-	-	-	-	-	-	-	-	-
In-migrated Health Professionals ¹	0	-	0	-	0	-	0	-	0	-
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	0		0		0		0		0	
Demand Components										
Vacancies ²	1	50%	2	100%	2	67%	3	100%	3	75%
Capital Projects	0	-	0	-	0	-	0	-	0	-
Attrition (Resignations, Retirements and Other Terminations)	1	50%	1	50%	1	33%	1	33%	1	25%
Population Growth	0	-	0	-	0	-	0	-	0	-
New Public Commitments	0	-	0	-	0	-	0	-	0	-
Total Forecasted Demand	2		2		3		3		4	
Estimated Gap										
		-2		-2		-3		-3		-4

¹ Data is not available from the regulator.

² Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³ Proportions may not add up to 100 and count may not sum up to totals due to rounding.

MEDIUM PRIORITY

Training Program Entry Prerequisites:

- N/A

Training Program Length (Credential Type):

- N/A

Labour Force Attachment Rate:

- N/A

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
N/A	N/A	N/A
Total		

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.15

Other Labour Force Considerations:

Profile 9: Combined Lab & X-Ray Technologists



Combined Lab & X-Ray Technologists

Unregulated

Perform laboratory/radiology duties for the detection, prevention and management of physiological and pathological conditions.



391

Payroll (Public) 340 (87%)
Non-payroll (Private) 51 (13%)

Estimated Headcounts (as of March 31, 2024)

\$305K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	25	North 12 (48%)
Permanent	20	South 13 (52%)
Temporary	5	Regina 0 (0%)
		Saskatoon 0 (0%)

SHA & Affiliate Vacancies (as of April 1, 2024)

	-	North -
Permanent	-	South -
Temporary	-	Regina -
	-	Saskatoon -

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ³	Share ³	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	31	100%	32	100%	26	100%	25	100%	25	100%
Grads from Interprovincial Training Programs	-	-	-	-	-	-	-	-	-	-
In-migrated Health Professionals ¹	0	-	0	-	0	-	0	-	0	-
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	31		32		26		25		25	

Demand Components

Vacancies ²	20	71%	0	-	0	-	0	-	0	-
Capital Projects	0	-	0	-	0	-	0	-	0	-
Attrition (Resignations, Retirements and Other Terminations)	8	29%	8	67%	8	67%	8	67%	8	67%
Population Growth	0	-	5	42%	4	33%	4	33%	4	33%
New Public Commitments	0	-	0	-	0	-	0	-	0	-
Total Forecasted Demand	28		12		12		12		12	

Estimated Gap

3	19	14	12	13
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¹Occupation is not regulated.

²Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³Proportions may not add up to 100 and count may not sum up to totals due to rounding.

LOW PRIORITY

Training Program Entry Prerequisites:

- Direct entry from high school.

Training Program Length (Credential Type):

- 97 weeks (Diploma)

Labour Force Attachment Rate:

- 93%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
Saskatchewan Polytechnic (Saskatoon)	30	88%
Total	30	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.25

Other Labour Force Considerations:

- Combined lab and X-ray technologists may receive a one-time rural and remote recruitment incentive of \$40,000. This incentive is paid over three years for a matching return-of-service agreement for filling a permanent full-time position in a rural and remote Saskatchewan location.

Profile 10: Continuing Care Assistants



Continuing Care Assistants

Unregulated

Provide personal care and activities of daily living for clients/patients/residents to encourage optimum level of functioning. Support clients/patients/residents in meeting their physical, emotional, psychological and spiritual needs.

13,730 Payroll (Public) 10,160 (74%)
Non-payroll (Private) 3,570 (26%)

Estimated Headcounts (as of March 31, 2024)

\$48M

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	447
North	86 (19%)
South	157 (35%)
Regina	70 (16%)
Saskatoon	134 (30%)
Permanent	Temporary
412	35

SHA & Affiliate Vacancies (as of April 1, 2024)

	-
North	-
South	-
Regina	-
Saskatoon	-
Permanent	Temporary
-	-

SCA Vacancies (as of April 1, 2024)

	2024-25	2025-26	2026-27	2027-28	2028-29
Supply Components					
Grads from Domestic Training Programs	484	100%	608	100%	608
Grads from Interprovincial Training Programs	-	-	-	-	-
In-migrated Health Professionals ¹	0	-	0	-	0
Targeted Recruitment Initiatives	0	-	0	-	0
Total Forecasted Supply	484	608	608	608	608
Demand Components					
Vacancies ²	412	36%	671	53%	663
Capital Projects	252	22%	35	3%	37
Attrition (Resignations, Retirements and Other Terminations)	383	33%	389	31%	393
Population Growth	0	-	177	14%	149
New Public Commitments	108	9%	0	-	0
Total Forecasted Demand	1,155	1,271	1,242	1,918	1,872
Estimated Gap	-671	-663	-634	-1,310	-1,264

¹ Occupation is not regulated.

² Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³ Proportions may not add up to 100 and count may not sum up to totals due to rounding.

LOW PRIORITY

Training Program Entry Prerequisites:

- Direct entry from high school or successful completion of fifteen (15) post-secondary credits from a recognized institution.

Training Program Length (Credential Type):

- 32 weeks (Certificate)

Labour Force Attachment Rate:

- 81%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
Saskatchewan Polytechnic (Online, Prince Albert, Regina and Saskatoon)	173	94%
Regional Colleges	682	76%
Carlton Trail College (Humboldt, Wakaw, Watrous, Wynyard)		
Cumberland College (Melfort)		
Dumont Technical Institute (La Loche, Prince Albert, Regina, Saskatoon)		
Great Plains College (Biggar, Kindersley, Swift Current)		
Lakeland College (Lloydminster)		
North West College (Lloydminster, Meadow Lake, North Battleford)		
Northlands College (Air Ronge)		
Parkland College (Canora, Fort Qu'Appelle, Yorkton)		
Saskatchewan Indian Institute of Technology (Prince Albert, Saskatoon)		
Southeast College (Assiniboia, Estevan, Weyburn, Whitewood)		
Suncrest College (Melfort, Yorkton)		
Total	855	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.23

Other Labour Force Considerations:

- Students in their final clinical placements are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon. Also, CCAs who accept a full-time permanent position with the SHA or affiliates in a rural and remote location are eligible for \$30,000 in exchange for three years return in service.
- In 2024-25, 292.2 CCAs FTEs are needed to support public commitments and capital projects. The government also committed to adding 240 long-term care specialized beds in Regina in 2027-28, which will require 582 CCA FTEs, leading to the sharp increase in demand.
- CCA training seats were expanded at Saskatchewan Polytechnic and the regional colleges except Cumberland, Lakeland and Parkland Colleges as part of the 550 training seat expansions announced in January 2023.

Profile 11: Health Cooks



LOW PRIORITY

Responsible for creating menus, preparing meals, and adhering to strict food safety and sanitation regulations in hospitals, long-term care facilities, rehabilitation centres, and other healthcare settings.

1,466 Payroll (Public) 1,378 (94%)
Non-payroll (Private) 88 (6%)

Estimated Headcounts (as of March 31, 2024)

\$1.9M

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	Permanent	Temporary	
	30	-	
North	10 (33%)		
South	18 (60%)		
Regina	2 (7%)		
Saskatoon	0 (0%)		

	Permanent	Temporary	
	2	-	
North	0 (0%)		
South	0 (0%)		
Regina	0 (0%)		
Saskatoon	2 (100%)		

SHA & Affiliate Vacancies (as of April 1, 2024)

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ³	Share ³	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	32	100%	38	100%	38	100%	38	100%	38	100%
Grads from Interprovincial Training Programs	-	-	-	-	-	-	-	-	-	-
In-migrated Health Professionals ¹	0	-	0	-	0	-	0	-	0	-
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	32		38		38		38		38	
Demand Components										
Vacancies ²	32	21%	123	71%	137	74%	148	75%	161	77%
Capital Projects	83	54%	0	-	0	-	0	-	0	-
Attrition (Resignations, Retirements and Other Terminations)	37	24%	37	21%	37	20%	37	19%	36	17%
Population Growth	4	3%	14	8%	12	6%	14	7%	13	6%
New Public Commitments	0	-	0	-	0	-	0	-	0	-
Total Forecasted Demand	155		174		186		198		210	
Estimated Gap	-123		-137		-148		-161		-172	

¹Occupation is not regulated.

²Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³Proportions may not add up to 100 and count may not sum up to totals due to rounding.

Training Program Entry Prerequisites:

- Grade 10 (Grade 12 effective September 2024).

Training Program Length (Credential Type):

- 39 weeks (Certificate)

Labour Force Attachment Rate:

- 100%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
Saskatchewan Polytechnic (Moose Jaw, Prince Albert)	66	67%
Regional Colleges	12	52%
Cumberland College (Tisdale)		
Total	78	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.35

Other Labour Force Considerations:

- Students in their final clinical placements are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon.
- In 2024-25, 61.2 Health Cooks FTEs are needed to support capital projects including the Regina urgent care centre, Grenfell long-term care (LTC) facility, and Regina LTC standard beds.

Profile 12: Diagnostic Cardiac Sonographers



Diagnostic Cardiac Sonographers

Unregulated

Perform a variety of echocardiography techniques in order to obtain images to assist with the detection and diagnosis of conditions and diseases of the cardiovascular system.



24

Payroll (Public) 12 (50%)
Non-payroll (Private) 12 (50%)

Estimated Headcounts (as of March 31, 2024)



\$5K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	2
Permanent	0 (0%)
Temporary	2 (50%)
2	-
North	0 (0%)
South	1 (50%)
Regina	0 (0%)
Saskatoon	1 (50%)

SHA & Affiliate Vacancies (as of April 1, 2024)

	-
Permanent	-
Temporary	-
-	-
North	-
South	-
Regina	-
Saskatoon	-

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ³	Share ³	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	-	-	-	-	-	-	-	-	-	-
Grads from Interprovincial Training Programs	0	-	0	-	0	-	5	100%	5	100%
In-migrated Health Professionals ¹	0	-	0	-	0	-	0	-	0	-
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	0		0		0		5		5	
Demand Components										
Vacancies ²	2	15%	13	100%	13	100%	14	100%	9	100%
Capital Projects	0	-	0	-	0	-	0	-	0	-
Attrition (Resignations, Retirements and Other Terminations)	0	-	0	-	0	-	0	-	0	-
Population Growth	8	62%	0	-	0	-	0	-	0	-
New Public Commitments	2	15%	0	-	0	-	0	-	0	-
Total Forecasted Demand	13		13		14		14		9	
Estimated Gap										
	-13		-13		-14		-9		-4	

¹ Occupation is not regulated.

² Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³ Proportions may not add up to 100 and count may not sum up to totals due to rounding.

HIGH PRIORITY

Training Program Entry Prerequisites:

- Direct entry from high school.

Training Program Length (Credential Type):

- 2.5 years (Diploma)

Labour Force Attachment Rate:

- 88%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
Northern Alberta Institute of Technology (Edmonton)	6	100%
Total	6	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.14

Other Labour Force Considerations:

- Students in their final clinical placements are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon.
- As part of the 2024-25 budget announcement, 6 training seats will be secured through an Interprovincial Agreement (IPA) in the 2024-25 academic year.
- In 2024-25, 2.1 Diagnostic Cardiac Sonographers FTEs are needed to support public commitments including specialized cardiosciences services.

Profile 13: Diagnostic Medical Sonographers



Diagnostic Medical Sonographers

Unregulated

Perform a variety of ultrasound techniques in order to provide images to assist with the detection and diagnosis of conditions and diseases.



254

Payroll (Public) 127 (50%)
Non-payroll (Private) 127 (50%)

Estimated Headcounts (as of March 31, 2024)

\$446K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

Permanent	Temporary	North	3 (30%)
		South	3 (30%)
Regina	2 (20%)	Regina	-
Saskatoon	2 (20%)	Saskatoon	-

SHA & Affiliate Vacancies (as of April 1, 2024)

Permanent	Temporary	North	-
		South	-
Regina	-	Regina	-
Saskatoon	-	Saskatoon	-

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ³	Share ³	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	-	-	-	-	-	-	5	26%	5	26%
Grads from Interprovincial Training Programs	7	100%	7	100%	14	100%	14	74%	14	74%
In-migrated Health Professionals ¹	0	-	0	-	0	-	0	-	0	-
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	7		7		14		19		19	
Demand Components										
Vacancies ²	10	43%	17	63%	20	65%	18	62%	10	53%
Capital Projects	3	13%	2	7%	3	10%	3	10%	0	-
Attrition (Resignations, Retirements and Other Terminations)	5	22%	5	19%	6	19%	6	21%	6	32%
Population Growth	0	-	3	11%	3	10%	3	10%	3	16%
New Public Commitments	5	22%	0	-	0	-	0	-	0	-
Total Forecasted Demand	23		27		31		29		19	
Estimated Gap		-17		-20		-18		-10		0

¹Occupation is not regulated.

²Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³Proportions may not add up to 100 and count may not sum up to totals due to rounding.

LOW PRIORITY

Training Program Entry Prerequisites:

- Direct entry from high school.

Training Program Length (Credential Type):

- 2.5 years/28 months (Diploma)

Labour Force Attachment Rate:

- 88%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
Southern Alberta Institute of Technology (Calgary)	16	96%
Regional Colleges	6	100%
Suncrest College (Yorkton)		
Total	22	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.40

Other Labour Force Considerations:

- Students in their final clinical placements are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon.
- In 2024-25, 5.8 Diagnostic Medical Sonographers FTEs are needed to support capital projects and public commitments such as the Regina urgent care centre and clinical placement supports.
- As part of the 550 seat expansions announced in January 2023, 8 seats were added at Southern Alberta Institute of Technology (SAIT) in the 2023-24 academic year, making a total of 16 seats at SAIT.
- In February 2024, the government announced a new diagnostic medical sonography training program at Suncrest College. The program is scheduled to begin in Fall 2024 and will have 6 seats, making a grand total of 22 seats.

Profile 14: Dietitians



Dietitians

Regulated – Saskatchewan College of Dietitians

LOW PRIORITY

Work with individuals or groups to prevent, treat or manage health conditions with food and nutrition. Dietitians also provide one-on-one counseling or group classes about food and health and determine the nutrients to deliver through a tube or IV if an individual is unable to eat food on their own.



421 Payroll (Public) 208 (49%)
Non-payroll (Private) 213 (51%)

Estimated Headcounts (as of March 31, 2024)



\$10K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	9	North 4 (44%)
South	2 (22%)	South 0 (0%)
Regina	0 (0%)	Regina 1 (50%)
Saskatoon	3 (33%)	Saskatoon 1 (50%)
Permanent	Temporary	
7	2	

SHA & Affiliate Vacancies (as of April 1, 2024)

	2	North 0 (0%)
South	-	South 0 (0%)
Regina	-	Regina 1 (50%)
Saskatoon	-	Saskatoon 1 (50%)
Permanent	Temporary	
2	-	

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ²	Share ²	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	14	56%	15	65%	14	67%	12	71%	14	78%
Grads from Interprovincial Training Programs	-	-	-	-	-	-	-	-	-	-
In-migrated Health Professionals	11	44%	8	35%	7	33%	5	29%	4	22%
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	25		23		21		17		18	

Demand Components

Vacancies ¹	9	38%	0	-	0	-	0	-	0	-
Capital Projects	0	-	1	7%	0	-	0	-	0	-
Attrition (Resignations, Retirements and Other Terminations)	8	33%	9	60%	9	69%	9	64%	9	64%
Population Growth	0	-	5	33%	4	31%	5	36%	5	36%
New Public Commitments	7	29%	0	-	0	-	0	-	0	-
Total Forecasted Demand	24		15		13		14		14	

Estimated Gap

1	8	8	3	4
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¹ Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

² Proportions may not add up to 100 and count may not sum up to totals due to rounding.

Training Program Entry Prerequisites:

- Applicants require a minimum of one year (30 credit units) of university courses, which must be completed by April 30 of the year of application, to be considered for admission.
- The requirement for "English" must include English Literature and Composition. A general "academic writing" course is not sufficient.

Training Program Length (Credential Type):

- 4 years (Bachelor's degree)

Labour Force Attachment Rate:

- 64%

Training Institution Location(s)

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
University of Saskatchewan (Saskatoon)	28*	80
Total	28	

* Dietitians and Nutritionists share the same training program (Nutrition) and therefore the same 28 seats.

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.22

Other Labour Force Considerations:

- Students in their final clinical placements are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon.
- In 2024-25, 5.4 Dietitian FTEs are needed to support public commitments including maternal and children's programs, acute care bed capacity, patient flow and emergency department stability and intensive and acute care.

Profile 15: Dosimetrists



Dosimetrists

Regulated - Saskatchewan Association of Medical Radiation Technologists

Generate a clinically acceptable treatment plan for patients, using clinical knowledge of anatomy and physiology; radiation biology and oncology; radiation safety and protection; and radiation therapy techniques. They also prepare radiation therapy treatment plans using sophisticated computer systems.



18

Payroll (Public) 15 (83%)
Non-payroll (Private) 3 (17%)

Estimated Headcounts (as of March 31, 2024)



\$24K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	North	-
	South	-
	Regina	-
	Saskatoon	-

	0	North	0
	0	South	0
	0	Regina	0
	0	Saskatoon	0

SHA & Affiliate Vacancies (as of April 1, 2024)

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ³	Share ³	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	0	-	0	-	0	-	0	-	0	-
Grads from Interprovincial Training Programs	-	-	-	-	-	-	-	-	-	-
In-migrated Health Professionals ¹	0	-	0	-	0	-	0	-	0	-
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	0		0		0		0		0	
Demand Components										
Vacancies ²	0	-	2	67%	3	100%	3	75%	4	80%
Capital Projects	0	-	0	-	0	-	0	-	0	-
Attrition (Resignations, Retirements and Other Terminations)	0	-	0	-	0	-	0	-	0	-
Population Growth	0	-	0	-	0	-	0	-	0	-
New Public Commitments	2	100%	0	-	0	-	0	-	0	-
Total Forecasted Demand	2		3		3		4		5	
Estimated Gap										
	-2		-3		-3		-4		-5	

¹ Data is not available from the regulator.

² Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³ Proportions may not add up to 100 and count may not sum up to totals due to rounding.

LOW PRIORITY

Training Program Entry Prerequisites:

- N/A

Training Program Length (Credential Type):

- N/A

Labour Force Attachment Rate:

- N/A

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
N/A	N/A	N/A
Total		

Payroll Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.08

Other Labour Force Considerations:

- Dosimetrists must have obtained a Bachelor Degree/ Diploma in Radiation Therapy and Certification for Basic Life Saver (BLS)-C.
- Dosimetrists must have had three (3) years previous experience as a qualified Radiation Therapist or in a related field.
- In 2024-25, 1.9 dosimetrist FTEs are needed to support public commitments to improve intensive and acute care.



Electro-Neurophysiology Technologists

Unregulated

HIGH PRIORITY

Perform technical procedures utilizing electroneurophysiology equipment for diagnosis and tracking of disease and pathology.



22

Payroll (Public) 22 (100%)
Non-payroll (Private) 0 (0%)

Estimated Headcounts (as of March 31, 2024)

\$11K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	4	North 0 (0%)
Permanent	3	South 0 (0%)
Temporary	1	Regina 1 (25%)
		Saskatoon 3 (75%)

SHA & Affiliate Vacancies (as of April 1, 2024)

	-	North -
Permanent	-	South -
Temporary	-	Regina -
	-	Saskatoon -

SCA Vacancies (as of April 1, 2024)

	2024-25	2025-26	2026-27	2027-28	2028-29
Supply Components	Count ³	Share ³	Count	Share	Count
Grads from Domestic Training Programs	0	-	0	-	0
Grads from Interprovincial Training Programs	2	100%	2	100%	2
In-migrated Health Professionals ¹	0	-	0	-	0
Targeted Recruitment Initiatives	0	-	0	-	0
Total Forecasted Supply	2		2		2
Demand Components					
Vacancies ²	3	25%	11	100%	10
Capital Projects	0	-	0	-	0
Attrition (Resignations, Retirements and Other Terminations)	1	8%	1	9%	1
Population Growth	1	8%	0	-	0
New Public Commitments	7	58%	0	-	0
Total Forecasted Demand	12		11		10
Estimated Gap	-11		-10		-9
	-9		-9		-8

¹ Occupation is not regulated.

² Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³ Proportions may not add up to 100 and count may not sum up to totals due to rounding.

Training Program Entry Prerequisites:

- The program typically takes two years to complete but may require some post-secondary education prior to entry.

Training Program Length (Credential Type):

- 2 years (Diploma)

Labour Force Attachment Rate:

- 75%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
British Columbia Institute of Technology (Vancouver)	2	100%
Total	2	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.18

Other Labour Force Considerations:

- Students are provided \$2K for clinical placement in their final year in exchange for a one-year return-in service in a rural/remote location.
- In 2024-25, 6.1 electro-neurophysiology technology FTEs are needed to support public commitments including emergency medical services stabilization and enhancements and specialized neuroscience services.
- Starting in the 2023-24 academic year, annual reserved seats (intake) increased from 2 every other year to 2 every year.



Health Information Management Practitioners

Unregulated

LOW PRIORITY

Responsible for ensuring accurate, dependable and secure collection, maintenance and dissemination of patient information.



329

Payroll (Public) 257 (78%)
Non-payroll (Private) 72 (22%)

Estimated Headcounts (as of March 31, 2024)

\$514K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	9	North	2 (22%)
Permanent		South	7 (78%)
Temporary		Regina	0 (0%)
	-	Saskatoon	0 (0%)

	2	North	0 (0%)
Permanent		South	0 (0%)
Temporary		Regina	2 (100%)
	-	Saskatoon	0 (0%)

SHA & Affiliate Vacancies (as of April 1, 2024)

SCA Vacancies (as of April 1, 2024)

	2024-25	2025-26	2026-27	2027-28	2028-29
Supply Components	Count ³	Share ³	Count	Share	Count
Grads from Domestic Training Programs	16	100%	12	100%	15
Grads from Interprovincial Training Programs	-	-	-	-	-
In-migrated Health Professionals ¹	0	-	0	-	0
Targeted Recruitment Initiatives	0	-	0	-	0
Total Forecasted Supply	16		12		15
Demand Components					
Vacancies ²	11	30%	21	55%	25
Capital Projects	1	3%	0	-	0
Attrition (Resignations, Retirements and Other Terminations)	11	37%	12	32%	12
Population Growth	12	32%	5	13%	4
New Public Commitments	2	5%	0	-	0
Total Forecasted Demand	37		38		41
Estimated Gap	-21		-25		-26
					-29
					-30

¹ Occupation is not regulated.

² Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³ Proportions may not add up to 100 and count may not sum up to totals due to rounding.

Training Program Entry Prerequisites:

- Direct entry from high school.

Training Program Length (Credential Type):

- 71 weeks (Diploma)

Labour Force Attachment Rate:

- 61%

Training Institution Location(s)

Annual Seat Intake (2024-25)

Graduation Rate (3-yr Avg.)

Saskatchewan Polytechnic (Online, Regina)

35

81%

Total

35

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.08

Other Labour Force Considerations:

- Students are provided \$2K for clinical placement in their final year in exchange for a one-year return-in service in a rural/remote location.

- In 2024-25, 3.1 HIMP FTEs are needed to support public commitments and capital projects such as the Regina urgent care centre.



Health Records Clerks

Unregulated

Manage patient data at a healthcare facility. Their duties include filing medical documents securely, processing admissions, and distributing a patient's medical chart to the appropriate department, ward, or member of staff so they can receive appropriate treatment.



326

Payroll (Public) 254 (78%)
Non-payroll (Private) 72 (22%)

Estimated Headcounts (as of March 31, 2024)

\$239K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

35

North	9 (26%)
South	9 (26%)
Regina	8 (23%)
Saskatoon	9 (26%)

34

1

SHA & Affiliate Vacancies (as of April 1, 2024)

0

Permanent Temporary

North	0 (0%)
South	0 (0%)
Regina	0 (0%)
Saskatoon	0 (0%)

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ²	Share ³	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	0	-	0	-	0	-	0	-	0	-
Grads from Interprovincial Training Programs	N/A	-	N/A	-	N/A	-	N/A	-	N/A	-
In-migrated Health Professionals ¹	0	-	0	-	0	-	0	-	0	-
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	0		0		0		0		0	
Demand Components										
Vacancies ²	34	85%	40	83%	48	86%	56	88%	64	89%
Capital Projects	0	-	0	-	0	-	0	-	0	-
Attrition (Resignations, Retirements and Other Terminations)	5	13%	5	10%	5	9%	5	8%	5	7%
Population Growth	1	3%	3	6%	2	4%	3	5%	3	4%
New Public Commitments	0	-	0	-	0	-	0	-	0	-
Total Forecasted Demand	40		48		56		64		72	
Estimated Gap										
	-40		-48		-56		-64		-72	

¹Occupation is not regulated.

²Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³Proportions may not add up to 100 and count may not sum up to totals due to rounding.

MEDIUM PRIORITY

Training Program Entry Prerequisites:

- N/A

Training Program Length (Credential Type):

- N/A

Labour Force Attachment Rate:

- N/A

Training Institution Location(s)

Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
---------------------------------	--------------------------------

N/A

N/A

N/A

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.13

Other Labour Force Considerations:

- Unlike health information management practitioners, health records clerks do not respond to requests for release of information, perform data quality checks and ensure data meets national and provincial standards, and perform quantitative analysis related to health records.

Profile 19: Licensed Practical Nurses



Licensed Practical Nurses

Regulated - College of Licensed Practical Nurses of Saskatchewan

Promote health and healing and provide education as members of the health care team to achieve optimum care for clients/patients/residents in all phases of health care.

4,310 Payroll (Public) 3,928 (91%)
Non-payroll (Private) 382 (9%)

Estimated Headcounts (as of March 31, 2024)

	256	North 58 (23%)
Permanent	Temporary	South 69 (27%)
201	55	Regina 65 (25%)
Saskatoon		Saskatoon 64 (25%)

SHA & Affiliate Vacancies (as of April 1, 2024)

\$29.4M

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	1	North 0 (0%)
Permanent	Temporary	South 1 (100%)
1	-	Regina 0 (0%)
		Saskatoon 0 (0%)

SCA Vacancies (as of April 1, 2024)

	2024-25		2025-26		2026-27		2027-28		2028-29	
Supply Components	Count ²	Share ²	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	115	39%	173	49%	176	49%	176	49%	176	48%
Grads from Interprovincial Training Programs	N/A	-	N/A	-	N/A	-	N/A	-	N/A	-
In-migrated Health Professionals	177	61%	180	51%	182	51%	185	51%	188	52%
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	292		353		358		361		364	
Demand Components										
Vacancies ¹	202	50%	116	41%	0	-	0	-	0	-
Capital Projects	33	8%	6	2%	9	6%	172	51%	1	1%
Attrition (Resignations, Retirements and Other Terminations)	99	24%	101	36%	104	65%	106	32%	109	67%
Population Growth	0	-	58	21%	49	30%	56	17%	52	32%
New Public Commitments	75	18%	0	-	0	-	0	-	0	-
Total Forecasted Demand	408		282		161		334		162	
Estimated Gap	-116		71		196		26		201	

¹ Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

² Proportions may not add up to 100 and count may not sum up to totals due to rounding.

LOW PRIORITY

Training Program Entry Prerequisites:

- Direct entry from high school.

Training Program Length (Credential Type):

- 76 weeks (Diploma)

Labour Force Attachment Rate:

- 84%

Training Institution Location(s)

Saskatchewan Polytechnic (Online, Prince Albert, Regina, Saskatoon)

Annual Seat Intake (2024-25)

Graduation Rate (3-yr Avg.)

110 75%

196 68%

Regional Colleges

Carlton Trail College (Watrous)

Cumberland College (Melfort)

Dumont Technical Institute (Prince Albert, Regina, Saskatoon)

Great Plains College (Biggar, Swift Current)

North West College (North Battleford)

Northlands College (Air Ronge)

Parkland College (Yorkton)

Saskatchewan Indian Institute of Technology (Saskatoon)

Southeast College (Weyburn)

306

Total

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.23

Other Labour Force Considerations:

- LPNs may receive a one-time \$40K rural and remote recruitment incentive allocated over three years in eligible rural and remote Saskatchewan locations with a three-year return-in-service agreement. Also, students are eligible for a \$2K final clinical placement bursary in exchange for one-year return-in service in a rural/remote location.

- In 2024-25, 87.6 LPN FTEs are needed to support public commitments and capital projects such as the Grenfell long-term care (LTC) facility, Regina LTC standards beds and Saskatoon emergency medical services and community paramedicine resources.

- Training seats were expanded at Saskatchewan Polytechnic and Regional Colleges as part of the 550 seat expansions announced in January 2023.



Magnetic Resonance Imaging Technologists

Regulated - College of Medical Radiation and Imaging Professionals of Saskatchewan

HIGH PRIORITY

Perform diagnostic Magnetic Resonance Imaging scans for the diagnosis and tracking of disease and pathology.



65
Payroll (Public) 58 (89%)
Non-payroll (Private) 7 (11%)

Estimated Headcounts (as of March 31, 2024)

\$127K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	5	North 0 (0%)
Permanent	4	South 0 (0%)
Temporary	1	Regina 2 (40%)
		Saskatoon 3 (60%)

SHA & Affiliate Vacancies (as of April 1, 2024)

	-	North -
Permanent	-	South -
Temporary	-	Regina -
	-	Saskatoon -

SCA Vacancies (as of April 1, 2024)

	2024-25	2025-26	2026-27	2027-28	2028-29
Supply Components	Count ³	Share ³	Count	Share	Count
Grads from Domestic Training Programs	N/A	-	N/A	-	N/A
Grads from Interprovincial Training Programs	0	-	6	100%	7
In-migrated Health Professionals ¹	0	-	0	-	0
Targeted Recruitment Initiatives	0	-	0	-	0
Total Forecasted Supply	0		6		7
Demand Components					
Vacancies ²	4	17%	23	92%	19
Capital Projects	0	-	0	-	0
Attrition (Resignations, Retirements and Other Terminations)	2	9%	2	8%	2
Population Growth	3	13%	1	4%	1
New Public Commitments	15	65%	0	-	0
Total Forecasted Demand	23		25		22
Estimated Gap	-23		-19		-15
					-10
					-6

¹ Data is not available from the regulator.

² Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³ Proportions may not add up to 100 and count may not sum up to totals due to rounding.

Training Program Entry Prerequisites:

- Direct entry from high school.

Training Program Length (Credential Type):

- 2 years (Diploma)

Labour Force Attachment Rate:

- 100%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
Northern Alberta Institute of Technology (Edmonton- Online)	7	100%
Total	7	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.32

Other Labour Force Considerations:

- In 2023-24, SHA provided each MRI Technology student a bursary of \$5,250 .
- In 2024-25, 11.0 magnetic resonance imaging technology FTEs are needed to support public commitments to improve intensive and acute care.
- 7 seats were added at Northern Alberta Institute of Technology in the 2023-24 academic year as part of the 550 seat expansions announced in January 2023.

Profile 21: Medical Laboratory Assistants



Medical Laboratory Assistants

Unregulated

Responsible for specimen collection and pre-analytical specimen handling/processing.



313

Payroll (Public) 272 (87%)
Non-payroll (Private) 41 (23%)

Estimated Headcounts (as of March 31, 2024)

\$1.1M

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	14	North 2 (14%)
Permanent	5 (36%)	South
Temporary	4 (29%)	Regina
	Saskatoon 3 (21%)	Saskatoon

SHA & Affiliate Vacancies (as of April 1, 2024)

	-	North	-
Permanent	-	South	-
Temporary	-	Regina	-
	-	Saskatoon	-

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ³	Share ³	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	12	100%	13	100%	13	100%	13	100%	13	100%
Grads from Interprovincial Training Programs	N/A	-	N/A	-	N/A	-	N/A	-	N/A	-
In-migrated Health Professionals ¹	0	-	0	-	0	-	0	-	0	-
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	12		13		13		13		13	
Demand Components										
Vacancies ²	14	34%	29	66%	30	67%	33	61%	41	63%
Capital Projects	7	17%	0	-	2	4%	7	13%	9	14%
Attrition (Resignations, Retirements and Other Terminations)	10	24%	10	23%	10	22%	11	20%	11	17%
Population Growth	0	-	4	9%	4	9%	4	7%	4	6%
New Public Commitments	10	24%	0	-	0	-	0	-	0	-
Total Forecasted Demand	41		44		46		54		65	
Estimated Gap		-29		-30		-33		-41		-52

¹ Occupation is not regulated.

² Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³ Proportions may not add up to 100 and count may not sum up to totals due to rounding.

LOW PRIORITY

Training Program Entry Prerequisites:

- Direct entry from high school.

Training Program Length (Credential Type):

- 32 weeks (Applied Certificate)

Labour Force Attachment Rate:

- 61%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
Saskatchewan Polytechnic (Saskatoon)	21	84%
Regional Colleges	6	100%
Suncrest College (Yorkton)		
Total	27	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.18

Other Labour Force Considerations:

- Students in clinical placements in their final year are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon.
- MLAs may receive a one-time \$30K rural and remote recruitment incentive allocated over three years in eligible rural and remote Saskatchewan locations with a three-year return-in-service agreement.
- In 2024-25, 13.9 medical laboratory assistant FTEs are needed to support public commitments and capital projects such as the Regina urgent care centre.
- A medical laboratory assistant program was developed at Suncrest College with an annual intake of 6 seats, starting in the 2023-24 academic year.
- The government also added 5 seats at the Saskatchewan Polytechnic as part of the 550 seat expansions announced in January 2023.

Profile 22: Medical Laboratory Technologists



Medical Laboratory Technologists

Regulated - Saskatchewan Society of Medical Laboratory Technologists

Perform laboratory duties for the detection, prevention and management of physiological and pathological conditions.



747

Payroll (Public) 640 (86%)
Non-payroll (Private) 107 (14%)

Estimated Headcounts (as of March 31, 2024)

\$3.6M

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	Permanent	Temporary	North	South	Regina	Saskatoon
	25	3	5 (18%)	10 (36%)	9 (32%)	4 (14%)

SHA & Affiliate Vacancies (as of April 1, 2024)

	Permanent	Temporary	North	South	Regina	Saskatoon
	-	-	-	-	-	-

SCA Vacancies (as of April 1, 2024)

	2024-25		2025-26		2026-27		2027-28		2028-29	
Supply Components	Count ²	Share ²	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	28	57%	25	53%	33	59%	42	64	42	63%
Grads from Interprovincial Training Programs	N/A	-	N/A	-	N/A	-	N/A	-	N/A	-
In-migrated Health Professionals	21	43%	22	47%	23	41%	24	36%	25	37%
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	49		47		56		66		67	
Demand Components										
Vacancies ¹	25	23%	59	60%	52	51%	46	45%	38	50%
Capital Projects	3	3%	0	-	13	13%	18	17%	0	-
Attrition (Resignations, Retirements and Other Terminations)	28	26%	28	29%	28	27%	28	27%	28	37%
Population Growth	45	42%	11	11%	9	9%	11	11%	10	13%
New Public Commitments	8	7%	0	-	0	-	0	-	0	-
Total Forecasted Demand	108		98		102		103		76	
Estimated Gap			-59		-52		-46		-38	

¹ Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

² Proportions may not add up to 100 and count may not sum up to totals due to rounding.

MEDIUM PRIORITY

Training Program Entry Prerequisites:

- Direct entry from high school.

Training Program Length (Credential Type):

- 104 weeks (Diploma)

Labour Force Attachment Rate:

- 89%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
Saskatchewan Polytechnic (Saskatoon)	60	81%
Total	60	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.07

Other Labour Force Considerations:

- Students in clinical placements in their final year are eligible for a \$2K bursary for a one-year return-in-service in a location outside Regina and Saskatoon.
- MLTs may receive a one-time \$40K rural and remote recruitment incentive allocated over three years in eligible rural and remote Saskatchewan locations with a three-year return-in-service agreement.
- In 2024-25, 10.2 medical laboratory technology FTEs are needed to support public commitments and capital projects such as the Regina urgent care centre.
- The full expansion of 20 seats at Saskatchewan Polytechnic will be achieved in the 2024-25 academic year. These seats are part of the 550 seat expansions announced in January 2023.

Profile 23: Medical Physicists



Medical Physicists

Unregulated

Use x-rays, ultrasound, electromagnetic and electric fields, thermal and ultraviolet light, heat, and lasers to diagnose and treat patients. They work in a variety of settings, including clinical, academic, and research facilities. Most medical physicists work in medical diagnostic departments, cancer healthcare centres, or hospital-based research institutes.



9
Payroll (Public) 9 (100%)
Non-payroll (Private) 0 (0%)

Estimated Headcounts (as of March 31, 2024)



\$-

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	North	-
	South	-
	Regina	-
	Saskatoon	-
Total		

	4	North	0 (0%)
	-	South	0 (0%)
	4	Regina	1 (25%)
	-	Saskatoon	3 (75%)
Total			

SHA & Affiliate Vacancies (as of April 1, 2024)

SCA Vacancies (as of April 1, 2024)

	2024-25	2025-26	2026-27	2027-28	2028-29
Supply Components	Count ²	Share ³	Count	Share	Count
Grads from Domestic Training Programs	0	-	0	-	0
Grads from Interprovincial Training Programs	N/A	-	N/A	-	N/A
In-migrated Health Professionals ¹	0	-	0	-	0
Targeted Recruitment Initiatives	0	-	0	-	0
Total Forecasted Supply	0		0		0
Demand Components					
Vacancies ²	4	80%	5	83%	6
Capital Projects	0	-	0	-	0
Attrition (Resignations, Retirements and Other Terminations)	0	-	0	-	0
Population Growth	1	20%	0	-	0
New Public Commitments	0	-	0	-	0
Total Forecasted Demand	5		6		7
Estimated Gap	-5		-6		-7

¹Occupation is not regulated.

²Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³Proportions may not add up to 100 and count may not sum up to totals due to rounding.

HIGH PRIORITY

Training Program Entry Prerequisites:

- N/A

Training Program Length (Credential Type):

- N/A

Labour Force Attachment Rate:

- N/A

Training Institution Location(s)

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
N/A	N/A	N/A
Total	N/A	N/A

Payroll Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.09

Other Labour Force Considerations:

- Medical physics is a specialized occupation employed only by the Saskatchewan Cancer Agency.



Medical Radiation Technologists

Regulated - College of Medical Radiation and Imaging Professionals of Saskatchewan

Perform diagnostic technical procedures utilizing radiation equipment for the diagnosis and tracking of disease and pathology.



656 Payroll (Public) 548 (84%)
Non-payroll (Private) 108 (16%)

Estimated Headcounts (as of March 31, 2024)

\$1.6M

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

Permanent	Temporary	North	11 (28%)
		South	7 (18%)
Regina	15 (38%)		
Saskatoon	6 (15%)		

SHA & Affiliate Vacancies (as of April 1, 2024)

Permanent	Temporary	North	0
		South	0
Regina	0	0	0
Saskatoon	0	0	0

SCA Vacancies (as of April 1, 2024)

	2024-25	2025-26	2026-27	2027-28	2028-29
Supply Components	Count ²	Share ²	Count	Share	Count
Grads from Domestic Training Programs	15	68%	15	63%	20
Grads from Interprovincial Training Programs	N/A	-	N/A	-	N/A
In-migrated Health Professionals	7	32%	9	38%	11
Targeted Recruitment Initiatives	0	-	0	-	0
Total Forecasted Supply	22		24		31
Demand Components					
Vacancies ¹	36	44%	60	75%	56
Capital Projects	8	10%	0	-	3
Attrition (Resignations, Retirements and Other Terminations)	12	15%	12	15%	12
Population Growth	0	-	8	10%	7
New Public Commitments	26	32%	0	-	0
Total Forecasted Demand	81		80		77
Estimated Gap	-60		-56		-46
					-48
					-24

¹ Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

² Proportions may not add up to 100 and count may not sum up to totals due to rounding.

MEDIUM PRIORITY

Training Program Entry Prerequisites:

- Direct entry from high school.

Training Program Length (Credential Type):

- 2.5 years (Diploma)

Labour Force Attachment Rate:

- 86%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
Saskatchewan Polytechnic (Saskatoon)	40	85%
Total	40	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.37

Other Labour Force Considerations:

- Medical radiation technology (MRT) as used on the payroll refers to medical radiological technology which is the name of the training program at Saskatchewan Polytechnic.
- Students in clinical placements in their final year are eligible for a \$2K bursary for a one-year return-in-service in a location outside Regina and Saskatoon.
- MRTs may receive a one-time \$40K rural and remote recruitment incentive allocated over three years in eligible rural and remote Saskatchewan locations with a three-year return-in-service agreement.
- In 2024-25, 24.7 MRT FTEs are needed to support public commitments and capital projects including improving breast cancer services, reducing medical imaging wait times and the Regina urgent care centre.
- The full expansion of 20 seats at Saskatchewan Polytechnic will be achieved in the 2024-25 academic year. These seats are part of the 550 seat expansions announced in January 2023.



Mental Health Therapists

Unregulated

Specialize in treating mental health conditions and emotional difficulties. They help people manage mental health issues like depression, anxiety, stress, and more. Mental health therapists are trained to use techniques that help improve your mental health.



234

Payroll (Public) 136 (58%)
Non-payroll (Private) 98 (42%)

Estimated Headcounts (as of March 31, 2024)



\$43K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	Permanent		Temporary	
	North	South	Regina	Saskatoon
Count	8	3	0	0
Percentage	(73%)	(27%)	(0%)	(0%)

	Permanent		Temporary	
	North	South	Regina	Saskatoon
Count	-	-	-	-
Percentage	-	-	-	-

SHA & Affiliate Vacancies (as of April 1, 2024)

SCA Vacancies (as of April 1, 2024)

	2024-25	2025-26	2026-27	2027-28	2028-29
Supply Components	Count ³	Share ³	Count	Share	Count
Grads from Domestic Training Programs	45	100%	38	100%	41
Grads from Interprovincial Training Programs	N/A	-	N/A	-	N/A
In-migrated Health Professionals ²	0	-	0	-	0
Targeted Recruitment Initiatives	0	-	0	-	0
Total Forecasted Supply	45		38		41
Demand Components					
Vacancies ²	8	20%	0	-	0
Capital Projects	0	-	0	-	0
Attrition (Resignations, Retirements and Other Terminations)	7	17%	7	70%	7
Population Growth	0	-	3	30%	2
New Public Commitments	26	63%	0	-	0
Total Forecasted Demand	41		10		10
Estimated Gap	4		28		32

¹Occupation is not regulated.

²Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³Proportions may not add up to 100 and count may not sum up to totals due to rounding.

LOW PRIORITY

Training Program Entry Prerequisites:

- N/A

Training Program Length (Credential Type):

- N/A

Labour Force Attachment Rate:

- N/A

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
N/A	N/A	N/A
Total	N/A	N/A

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.18

Other Labour Force Considerations:

- Students are provided \$2K for clinical placement in their final year in exchange for a one-year return-in service in a rural/remote location.
- In 2024-25, 21.9 mental health therapy FTEs are needed to support public commitments to improve mental health and addictions services and intensive and acute care.



Nuclear Medicine Technologists

Regulated - College of Medical Radiation and Imaging Professionals of Saskatchewan

LOW PRIORITY

Prepare radiopharmaceuticals and perform technical procedures utilizing radiation and/or radioactive materials for the diagnosis and tracking of disease and pathology.



68

Payroll (Public) 68 (100%)
Non-payroll (Private) 0 (0%)

Estimated Headcounts (as of March 31, 2024)

\$54K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	3	North	0 (0%)
Permanent	3	South	0 (0%)
Temporary	-	Regina	2 (67%)
	-	Saskatoon	1 (33%)

	-	North	-
Permanent	-	South	-
Temporary	-	Regina	-
	-	Saskatoon	-

SHA & Affiliate Vacancies (as of April 1, 2024)

SCA Vacancies (as of April 1, 2024)

	2024-25	2025-26	2026-27	2027-28	2028-29
Supply Components	Count ³	Share ³	Count	Share	Count
Grads from Domestic Training Programs	N/A	-	N/A	-	N/A
Grads from Interprovincial Training Programs	2	100%	2	100%	3
In-migrated Health Professionals ¹	0	-	0	-	0
Targeted Recruitment Initiatives	0	-	0	-	0
Total Forecasted Supply	2		2		3
Demand Components					
Vacancies ²	3	38%	6	75%	6
Capital Projects	0	-	0	-	0
Attrition (Resignations, Retirements and Other Terminations)	1	13%	1	13%	1
Population Growth	2	25%	1	13%	1
New Public Commitments	1	13%	0	-	0
Total Forecasted Demand	8		8		7
Estimated Gap	-6		-6		-4
					-2

¹ Data is not available from the regulator.

² Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³ Proportions may not add up to 100 and count may not sum up to totals due to rounding.

Training Program Entry Prerequisites:

- Direct entry from high school.

Training Program Length (Credential Type):

- 22 months (Diploma)

Labour Force Attachment Rate:

- 78%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
Southern Alberta Institute of Technology (Calgary)	4	100%
Total	4	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.47

Other Labour Force Considerations:

- Students are provided \$2K for clinical placement in their final year in exchange for a one-year return-in service in a rural/remote location.
- In 2024-25, 1.0 Nuclear Medicine Technology FTEs are needed to support public commitments and capital projects.
- In 2024-25, 2 seats were added at Southern Alberta Institute of Technology as part of the 2024-25 budget announcement.

Profile 27: Nurse Practitioners



Nurse Practitioners

Regulated - College of Registered Nurses of Saskatchewan

HIGH PRIORITY

Provide a wide range of direct care services to people at every stage of life. They autonomously diagnose and treat illnesses, order and interpret tests and prescribe medications. In addition to treating illnesses, they teach individuals and their families about healthy living, preventing disease and managing illness.



360
Payroll (Public) 223 (62%)
Non-payroll (Private) 137 (38%)

Estimated Headcounts (as of March 31, 2024)

\$588K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	49	North 18 (37%)
Permanent	45	South 18 (37%)
Temporary	4	Regina 8 (16%)
		Saskatoon 5 (10%)

SHA & Affiliate Vacancies (as of April 1, 2024)

	7	North 0 (0%)
Permanent	6	South 0 (0%)
Temporary	1	Regina 4 (57%)
		Saskatoon 3 (43%)

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ³	Share ³	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	44	100%	48	100%	44	100%	44	100%	44	100%
Grads from Interprovincial Training Programs	N/A	-	N/A	-	N/A	-	N/A	-	N/A	-
In-migrated Health Professionals ¹	0	-	0	-	0	-	0	-	0	-
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	44		48		44		44		44	
Demand Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ³	Share ³	Count	Share	Count	Share	Count	Share	Count	Share
Vacancies ²	51	69%	30	70%	0	-	0	-	0	-
Capital Projects	0	-	0	-	1	7%	0	-	0	-
Attrition (Resignations, Retirements and Other Terminations)	10	14%	10	23%	10	71%	10	71%	10	77%
Population Growth	0	-	3	7%	3	21%	3	21%	3	23%
New Public Commitments	13	18%	0	-	0	-	0	-	0	-
Total Forecasted Demand	74		43		14		14		13	
Estimated Gap	-30		5		30		31		31	

¹Data is not available from the regulator.

²Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³Proportions may not add up to 100 and count may not sum up to totals due to rounding.

Training Program Entry Prerequisites:

- A bachelor's degree in Nursing, or equivalent, from a recognized college or university in an academic discipline relevant to the proposed field of study.
- 3600 hours of clinical practice as a Registered Nurse in the last five years.
- Current licensure as a registered nurse in a Canadian province or territory.

Training Program Length (Credential Type):

- 2 years (Master's degree)

Labour Force Attachment Rate:

- 100%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
University of Saskatchewan (Saskatoon)	40	76%
University of Regina (Regina)	25	104%
Total	65	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.18

Other Labour Force Considerations:

- Students in clinical placements in their final year are eligible for a \$2K bursary for a one-year return-in-service in a location outside Regina and Saskatoon.
- NPs may receive a one-time \$50K rural and remote recruitment incentive allocated over three years in eligible rural and remote Saskatchewan locations with a three-year return-in-service agreement.
- The Nurse Practitioner Relocation Grant (\$120,000) provides incentives to those NPs practicing in urban areas to move to positions in rural and remote locations with a population of 10,000 or less. Each grant is for \$40,000 disbursed over five years.
- In 2024-25, 10.7 nurse practitioner FTEs are needed to support public commitments including to the University of Regina student wellness centre and specialized cardiosciences services.
- In the 2023-24 academic year, 10 seats were added at University of Saskatchewan (5) and University of Regina/Saskatchewan Polytechnic (5) as part of the 150 seat expansions announced in 2022.

Profile 28: Nutritionists



Nutritionists

Unregulated

Evaluate clients' needs to identify their dietary requirements and restrictions. Nutritionists use their expert knowledge of nutrition and food to help others make better healthy food choices. Their duties include creating meal plans, training the public, and establishing goals.



29

Payroll (Public) 17 (59%)
Non-payroll (Private) 12 (41%)

Estimated Headcounts (as of March 31, 2024)

\$33.2

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

0
Permanent Temporary

-
Permanent Temporary

SHA & Affiliate Vacancies (as of April 1, 2024)

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ³	Share ³	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	0	-	0	-	0	-	0	-	0	-
Grads from Interprovincial Training Programs	-	-	-	-	-	-	-	-	-	-
In-migrated Health Professionals ¹	0	-	0	-	0	-	0	-	0	-
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	0		0		0		0		0	
Demand Components										
Vacancies ²	0	-	3	60%	5	71%	7	78%	9	90%
Capital Projects	0	-	0	-	0	-	0	-	0	-
Attrition (Resignations, Retirements and Other Terminations)	2	67%	1	20%	1	14%	1	11%	1	10%
Population Growth	2	67%	0	-	0	-	0	-	0	-
New Public Commitments	0	-	0	-	0	-	0	-	0	-
Total Forecasted Demand	3		5		7		9		10	
Estimated Gap										
	-3		-5		-7		-9		-10	

¹ Occupation is not regulated.

² Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³ Proportions may not add up to 100 and count may not sum up to totals due to rounding.

MEDIUM PRIORITY

Training Program Entry Prerequisites:

- Applicants require a minimum of one year (30 credit units) of university courses, which must be completed by April 30 of the year of application, to be considered for admission.
- The requirement for "English" must include English Literature and Composition. A general "academic writing" course is not sufficient.

Training Program Length (Credential Type):

- 4 years (Bachelor's degree)

Labour Force Attachment Rate:

- 0%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
University of Saskatchewan (Saskatoon)	28*	
Total	28	

* Dietitians and Nutritionists share the same training program (Nutrition) and therefore the same 28 seats.

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.20

Other Labour Force Considerations:

- As indicated by the post-secondary institution, graduates from the nutrition program become dietitians because the dietetics profession is regulated and therefore more desirable.



Occupational Therapists

Regulated – Saskatchewan College of Occupational Therapists

Help patients improve their everyday lives and solve problems that hinder their ability to perform certain activities such as self-care, work, school and leisure activities. They focus on physical and mental health treatment and therapy and provide services in patients' homes and communities through clinics, hospitals and care facilities, the private industry and government.



423

Payroll (Public) 290 (69%)
Non-payroll (Private) 133 (31%)

Estimated Headcounts (as of March 31, 2024)

\$120K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

42
Permanent **Temporary**
41 1

North	13 (31%)
South	10 (24%)
Regina	9 (21%)
Saskatoon	10 (24%)

North	N/A
South	N/A
Regina	N/A
Saskatoon	N/A

SHA & Affiliate Vacancies (as of April 1, 2024)

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ²	Share ²	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	-	-	-	-	-	-	-	-	31	51%
Grads from Interprovincial Training Programs	15	48%	15	50%	18	56%	18	58%	18	30%
In-migrated Health Professionals	16	52%	15	50%	14	44%	13	42%	12	20%
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	31		30		32		31		61	
Demand Components										
Vacancies ¹	41	54%	45	74%	31	63%	17	43%	8	35%
Capital Projects	0	-	1	2%	4	8%	7	18%	0	-
Attrition (Resignations, Retirements and Other Terminations)	9	12%	9	15%	9	18%	9	23%	10	43%
Population Growth	25	33%	6	10%	5	10%	6	15%	5	22%
New Public Commitments	1	1%	0	-	0	-	0	-	0	-
Total Forecasted Demand	76		61		49		40		23	
Estimated Gap	-45		-31		-17		-8		38	

¹ Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

² Proportions may not add up to 100 and count may not sum up to totals due to rounding.

MEDIUM PRIORITY

Training Program Entry Prerequisites:

- A four-year undergraduate degree with a minimum GPA 3.0 on the 4-point scale on the last courses, including approved Statistics and Human Anatomy courses.

Training Program Length (Credential Type):

- 26 months (Master's degree)

Labour Force Attachment Rate:

- 76%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
University of Alberta (Edmonton)	25	98%
Total	25	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.23

Other Labour Force Considerations:

- Students in their final clinical placements are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon.
- 5 seats were added to the 20 at the University of Alberta in the 2023-24 academic year, making a total of 25 seats. These seats are part of the 550 seat expansions announced in January 2023.
- The government has also announced the development of a domestic program with a first-year intake capacity of 40 seats. The anticipated launch is Fall 2026 and the first set of graduates are expected in 2028.

Profile 30: Perfusionists



Perfusionists

Unregulated

Primarily work with cardiac (heart) surgeons, anesthesiologists and other members of the operating room team. They maintain a patient's respiration, circulation and physiological state, and can administer drugs and blood products. They also provide on call and emergency coverage support for the operating team.



10

Payroll (Public) 10 (100%)
Non-payroll (Private) 0 (0%)

Estimated Headcounts (as of March 31, 2024)

\$142K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)



North	0
South	0
Regina	0
Saskatoon	0

Permanent Temporary



North	N/A
South	N/A
Regina	N/A
Saskatoon	N/A

SHA & Affiliate Vacancies (as of April 1, 2024)

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ³	Share ³	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	-	-	-	-	-	-	-	-	-	-
Grads from Interprovincial Training Programs	0	-	1	100%	1	100%	1	100%	1	100%
In-migrated Health Professionals ¹	0	-	0	-	0	-	0	-	0	-
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	0		1		1		1		1	
Demand Components										
Vacancies ²	0	-	2	67%	2	100%	2	100%	1	50%
Capital Projects	0	-	0	-	0	-	0	-	0	-
Attrition (Resignations, Retirements and Other Terminations)	0	-	1	33%	1	50%	1	50%	0	-
Population Growth	1	50%	0	-	0	-	0	-	0	-
New Public Commitments	0	-	0	-	0	-	0	-	0	-
Total Forecasted Demand	2		3		2		2		2	
Estimated Gap										
	-2		-2		-2		-1		-1	

¹ Occupation is not regulated.

² Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³ Proportions may not add up to 100 and count may not sum up to totals due to rounding.

HIGH PRIORITY

Training Program Entry Prerequisites:

- This program is for certified respiratory therapists, critical care nurses, cardiac professionals, or related degrees graduates, with at least two years of experience in cardiac critical care. Applicants must have completed a bachelor's degree (preferably a Bachelor of Science) and the required courses.

Training Program Length (Credential Type):

- 2 years (Advanced Certificate)

Labour Force Attachment Rate:

- 50%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
British Columbia Institute of Technology (Vancouver)	1	100%
Total	1	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 0.90

Other Labour Force Considerations:

- Students in their final clinical placements are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon.
- In the past, the Ministry signed a Letter of Understanding to provide perfusionists with a lump sum of \$50K in exchange for a three-year return in service.
- Starting in the 2023-24 academic year, the annual seat intake was increased from 1 every second year to alternating between 1 and 2 a year. This means that there were 2 seats in the 2023-24 academic year, there will be 1 in 2024-25 and 2 in 2025-26.
- The perfusionist training program is sometimes referred to as "cardiovascular perfusion".



Pharmacists

Regulated – Saskatchewan College of Pharmacy Professionals

Collaborate with patients, their families and other healthcare professionals to provide quality patient care. They develop, manage, monitor and advise patients and family members on medication plans and drug therapy programs, supervise and direct pharmacy staff, administer immunizations and assess patients, and prescribe medication to patients which complements the care provided by physicians. They work in community pharmacies, hospital pharmacies (in shifts and on-call) or academia.

1810 Payroll (Public) 394 (22%)
Non-payroll (Private) 1416 (78%)

Estimated Headcounts (as of March 31, 2024)

\$720K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	Permanent	Temporary
North	9 (26%)	
South	7 (20%)	
Regina	5 (14%)	
Saskatoon	14 (40%)	
Total	30	5

SHA & Affiliate Vacancies (as of April 1, 2024)

	Permanent	Temporary
North	0	
South	0	
Regina	1 (50%)	
Saskatoon	1 (50%)	
Total	2	-

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ²	Share ²	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	72	66%	73	68%	68	67%	70	69%	72	70%
Grads from Interprovincial Training Programs	-	-	-	-	-	-	-	-	-	-
In-migrated Health Professionals	37	34%	35	32%	34	33%	32	31%	31	30%
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	109		108		102		102		103	
Demand Components										
Vacancies ¹	32	35%	0	-	0	-	0	-	0	-
Capital Projects	2	2%	1	2%	0	-	12	16%	0	-
Attrition (Resignations, Retirements and Other Terminations)	33	36%	35	56%	37	64%	38	51%	40	63%
Population Growth	0	-	26	42%	22	38%	25	33%	23	37%
New Public Commitments	24	26%	0	-	0	-	0	-	0	-
Total Forecasted Demand	91		62		58		75		63	
Estimated Gap										
	18		46		44		28		40	

¹ Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

² Proportions may not add up to 100 and count may not sum up to totals due to rounding.

LOW PRIORITY

Training Program Entry Prerequisites:

- Completion of [60 credit units](#). The coursework must include 24 credit units taken in at least one academic year (September to April).

Training Program Length (Credential Type):

- 4 years (Doctor of Pharmacy (Pharm.D.))

Labour Force Attachment Rate:

- 85%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
University of Saskatchewan (Saskatoon)	90	94%
Total	90	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.18

Other Labour Force Considerations:

- Students in their final clinical placements are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon.
- In 2024-25, 21.9 pharmacist FTEs are needed to support/improve capital projects and public commitments including acute care bed capacity, patient flow and emergency department stability, organ tissue donation and transplantation, maternal and children's programs, the Regina Urgent Care Centre, specialized cardio and neuroscience services, Mental Health and Addictions services and the RxFiles program.
- The Pharm. D. program is an undergraduate degree and not a PhD program.

Profile 32: Pharmacy Technicians



Pharmacy Technicians

Regulated - Saskatchewan College of Pharmacy Professionals

LOW PRIORITY

Responsible for the acquisition, preparation, checking and distribution of medications/pharmaceutical products and supplies to Nursing Units, facilities and other community-based health care services.



406 Payroll (Public) 262 (65%)
Non-payroll (Private) 144 (35%)

Estimated Headcounts (as of March 31, 2024)

\$933K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	17	North 4 (24%)
South	3 (18%)	
Regina	2 (12%)	
Permanent	Temporary	Saskatoon 8 (47%)
16	1	

SHA & Affiliate Vacancies (as of April 1, 2024)

	-	North N/A
South	N/A	
Regina	N/A	
Permanent	Temporary	Saskatoon N/A
-	-	-

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ²	Share ²	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	16	64%	20	74%	29	85%	29	88%	29	91%
Grads from Interprovincial Training Programs	-	-	-	-	-	-	-	-	-	-
In-migrated Health Professionals	9	36%	7	26%	5	15%	4	12%	3	9%
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	25		27		34		33		32	
Demand Components										
Vacancies ¹	16	31%	27	59%	19	54%	1	4%	0	-
Capital Projects	3	6%	3	7%	0	-	5	22%	4	18%
Attrition (Resignations, Retirements and Other Terminations)	10	19%	10	22%	11	31%	11	48%	12	55%
Population Growth	2	4%	6	13%	5	14%	6	26%	5	23%
New Public Commitments	21	40%	0	-	0	-	0	-	0	-
Total Forecasted Demand	52		46		35		23		22	
Estimated Gap										
	-27		-19		-1		10		10	

¹ Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

² Proportions may not add up to 100 and count may not sum up to totals due to rounding.

Training Program Entry Prerequisites:

- Direct entry from high school.

Training Program Length (Credential Type):

- 51 weeks (Certificate)

Labour Force Attachment Rate:

- 100%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
Saskatchewan Polytechnic (Saskatoon)	48	65%
Total	48	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.12

Other Labour Force Considerations:

- Students in their final clinical placements are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon.
- 21.2 FTEs are required to support public commitments and capital projects in 2024-25 including acute care bed capacity, patient flow and emergency department stability, maternal and children's programs, the Regina Urgent Care Centre, and the Community Oncology Program of Saskatchewan (COPS).
- As part of the 550 seat expansions announced in January 2023, 24 pharmacy technician training seats were added in the 2023-24 academic year, making a total of 48 seats.

Profile 33: Physical Therapists



Physical Therapists

Regulated – Saskatchewan College of Physical Therapists

Evaluate and treat body disorders, help people of all ages and stages of life and treat patients primarily through exercising, stretches, using equipment, and other hands-on techniques. Physical Therapists work in hospitals, long-term care facilities, sports facilities, schools and clinics.



860
Payroll (Public) 409 (48%)
Non-payroll (Private) 451 (52%)

Estimated Headcounts (as of March 31, 2024)

\$216K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	Permanent	Temporary	North	South	Regina	Saskatoon
48	12 (25%)		N/A	N/A	N/A	
North	13 (27%)					
South	13 (27%)					
Regina						
Saskatoon	10 (21%)					

Permanent 47
 Temporary 1

SHA & Affiliate Vacancies (as of April 1, 2024)

SCA Vacancies (as of April 1, 2024)

	2024-25		2025-26		2026-27		2027-28		2028-29	
Supply Components	Count ²	Share ²	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	24	47%	33	53%	33	52%	33	51%	33	49%
Grads from Interprovincial Training Programs	-	-	-	-	-	-	-	-	-	-
In-migrated Health Professionals	27	53%	29	47%	31	48%	32	49%	34	51%
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	51		62		64		65		67	
Demand Components										
Vacancies ¹	47	49%	44	57%	15	29%	0	-	0	-
Capital Projects	0	-	1	1%	5	10%	16	33%	12	27%
Attrition (Resignations, Retirements and Other Terminations)	20	21%	21	27%	21	41%	21	44%	22	49%
Population Growth	7	7%	12	16%	10	20%	11	23%	11	24%
New Public Commitments	22	23%	0	-	0	-	0	-	0	-
Total Forecasted Demand	95		77		51		48		45	
Estimated Gap										
	-44		-15		13		16		22	

¹ Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

² Proportions may not add up to 100 and count may not sum up to totals due to rounding.

LOW PRIORITY

Training Program Entry Prerequisites:

- Completion of a 4-year post-secondary degree and the pre-requisite coursework – Human Physiology, Basic Human Anatomy and Statistics.

Training Program Length (Credential Type):

- 2 years (Master's degree)

Labour Force Attachment Rate:

- 65%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
University of Saskatchewan (Saskatoon)	55	92%
Total	55	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.24

Other Labour Force Considerations:

- Students in their final clinical placements are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon.
- 15 seats were added at the University of Saskatchewan in the 2023-24 academic year making a total of 55 seats. These seats (15) were part of the 550 seat expansions announced in January 2023.
- Physical therapists are also referred to as "physiotherapists".

Profile 34: Primary Care Paramedics



Primary Care Paramedics

Regulated – Saskatchewan College of Paramedics

Respond to calls for service and provide assessment, treatment and transportation of ill or injured persons.

LOW PRIORITY



1280

Payroll (Public) 462 (36%)
Non-payroll (Private) 818 (64%)

Estimated Headcounts (as of March 31, 2024)

\$2.9M

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	55	North 16 (29%)
South	31 (56%)	
Regina	8 (15%)	
Permanent		
Temporary		
49	6	Saskatoon 0 (0%)

	-	North N/A
South	N/A	
Regina	N/A	
Permanent		
Temporary		
-	-	Saskatoon N/A

SHA & Affiliate Vacancies (as of April 1, 2024)

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ³	Share ³	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	100	100%	164	100%	164	100%	164	100%	164	100%
Grads from Interprovincial Training Programs	-	-	-	-	-	-	-	-	-	-
In-migrated Health Professionals ¹	0	-	0	-	0	-	0	-	0	-
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	100		164		164		164		164	
Demand Components										
Vacancies ²	49	42%	17	38%	0	-	0	-	0	-
Capital Projects	0	-	0	-	0	-	0	-	0	-
Attrition (Resignations, Retirements and Other Terminations)	16	14%	17	38%	17	63%	18	62%	18	64%
Population Growth	0	-	11	24%	10	37%	11	38%	10	36%
New Public Commitments	52	44%	0	-	0	-	0	-	0	-
Total Forecasted Demand	117		45		27		29		28	
Estimated Gap	-17		119		137		135		136	

¹ Data is not available from the regulator.

² Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³ Proportions may not add up to 100 and count may not sum up to totals due to rounding.

Training Program Entry Prerequisites:

- Direct entry from high school.

Training Program Length (Credential Type):

- 51 weeks (Certificate)

Labour Force Attachment Rate:

- 80%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
Saskatchewan Polytechnic (Regina, Saskatoon)	192	38%
Regional Colleges	36	69%
Carlton Trail College (Humboldt)		
Parkland College (Melville)		
Suncrest College (Melville, Nipawin)		
Total	228	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.13

Other Labour Force Considerations:

- Students in their final clinical placements are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon.
- In 2024-25, 45.8 FTEs are required to support the stabilization and enhancement of emergency medical services (EMS) and Saskatoon EMS and community paramedicine resources.
- 64 Primary Care Paramedic (PCP) seats (32 in Regina and 32 in Saskatoon) were added to Saskatchewan Polytechnic in the 2023-24 academic year as part of the 550-seat expansions announced in January 2023. The expansion also included PCP seats at the regional colleges (Carlton Trail, Parkland and Suncrest Colleges), all of which were fully implemented in the 2023-24 academic year.
- Some PCPs undergo further training to become Advanced Care Paramedics which creates PCP vacancies.
- The Ministry will collaborate with the regulator to determine the percentage of new graduates who work in health and the percentage who move to other fields.

Profile 35: Psychologists



Psychologists

Regulated – Saskatchewan College of Psychologists

Provide many services including but not limited to consultation with and treatment of patients with mental health problems such as depression, phobias, etc. or those struggling with addictions. Psychologists work as practitioners or clinicians in hospitals, schools, clinics, private offices and correctional facilities and may also work as researchers in universities or other organizations.



544 Payroll (Public) 102 (19%)
Non-payroll (Private) 442 (81%)

Estimated Headcounts (as of March 31, 2024)

\$294K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	18	North 5 (28%)
Permanent	16	South 1 (6%)
Temporary	2	Regina 3 (17%)
		Saskatoon 9 (50%)

SHA & Affiliate Vacancies (as of April 1, 2024)

	-	North N/A
Permanent	-	South N/A
Temporary	-	Regina N/A
	-	Saskatoon N/A

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ²	Share ²	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	5	24%	7	28%	4	17%	6	23%	7	24%
Grads from Interprovincial Training Programs	-	-	-	-	-	-	-	-	-	-
In-migrated Health Professionals	16	76%	18	72%	19	83%	20	77%	22	76%
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	21		25		23		26		29	
Demand Components										
Vacancies ¹	16	15%	73	72%	64	70%	54	64%	40	57%
Capital Projects	0	-	0	-	0	-	0	-	0	-
Attrition (Resignations, Retirements and Other Terminations)	21	20%	22	22%	22	24%	22	26%	23	61%
Population Growth	57	53%	8	8%	6	7%	7	8%	7	10%
New Public Commitments	13	12%	0	-	0	-	0	-	0	-
Total Forecasted Demand	107		102		92		84		70	
Estimated Gap	-86		-91		-96		-99		-100	

¹ Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

² Proportions may not add up to 100 and count may not sum up to totals due to rounding.

MEDIUM PRIORITY

Training Program Entry Prerequisites:

- MSc: Four-year honors degree, or equivalent, from a college or university in a relevant academic field of study.
- PhD: Master's degree, or equivalent, from a recognized university in a relevant academic discipline and a cumulative weighted average of at least a 70% in the last two years of study.

Training Program Length (Credential Type):

- 2 years (Master's degree) or 5 years (PhD)

Labour Force Attachment Rate:

- 59%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
University of Saskatchewan (Saskatoon) - PhD	11	73%
University of Regina (Regina) – MSc.	14	81%
Total	25	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.15

Other Labour Force Considerations:

- Students in their final clinical placements are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon.
- The government added 4 new psychology training seats at the University at Regina and 2 at the University of Saskatchewan as part of the 550-seat expansions announced in January 2023.



Public Health Inspectors

Unregulated

Conduct inspections of restaurants and other types of food facilities, communicable disease investigations, and inspection and monitoring of public recreation facilities, public accommodations, water supplies, and sewage disposal systems and monitor activities to safeguard the environment and health of the public.



130
Payroll (Public) 78 (60%)
Non-payroll (Private) 52 (40%)

Estimated Headcounts (as of March 31, 2024)



\$32K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

Permanent	Temporary	North	4 (80%)
		South	1 (20%)
Regina	0 (0%)		
Saskatoon	0 (0%)		

SHA & Affiliate Vacancies (as of April 1, 2024)

Permanent	Temporary	North	N/A
		South	N/A
Regina	0 (0%)		N/A
Saskatoon	0 (0%)		N/A

SCA Vacancies (as of April 1, 2024)

	2024-25	2025-26	2026-27	2027-28	2028-29
Supply Components	Count ³	Share ³	Count	Share	Count
Grads from Domestic Training Programs	-	-	-	-	-
Grads from Interprovincial Training Programs	0	-	2	100%	2
In-migrated Health Professionals ¹	0	-	0	-	0
Targeted Recruitment Initiatives	0	-	0	-	0
Total Forecasted Supply	0		2		2
Demand Components					
Vacancies ²	4	24%	17	68%	23
Capital Projects	0	-	0	-	0
Attrition (Resignations, Retirements and Other Terminations)	6	35%	6	24%	6
Population Growth	7	41%	2	8%	2
New Public Commitments	0	-	0	-	0
Total Forecasted Demand	17		25		31
Estimated Gap	-17		-23		-29
					-36
					-42

¹ Occupation is not regulated.

² Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³ Proportions may not add up to 100 and count may not sum up to totals due to rounding.

MEDIUM PRIORITY

Training Program Entry Prerequisites:

- A 4-year baccalaureate degree in a related background including but not limited to health care, science, agriculture, and engineering from a recognized institution.

Training Program Length (Credential Type):

- 16 months (Diploma)

Labour Force Attachment Rate:

- 75%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
Concordia University of Edmonton (Edmonton)	2	100%
Total	2	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.07

Other Labour Force Considerations:

- Students in their final clinical placements are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon.

- As part of the 2024-25 budget announcements, the government committed to securing 4 seats through Interprovincial Agreements. The details of these new seats, including the institution(s) where the seats will be located, are yet to be determined.

Profile 37: Radiation Therapists



Radiation Therapists

Regulated - Saskatchewan Association of Medical Radiation Technologists

Help manage patients' well-being throughout treatment and provide patient support as needed. They play a critical role in radiation treatment planning, treatment delivery and verification, patient care and support, and delivering safe and accurate treatment.



78

Payroll (Public) 58 (74%)
Non-payroll (Private) 20 (26%)

Estimated Headcounts (as of March 31, 2024)

\$63K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	North	-
	South	-
	Regina	-
Permanent	Temporary	
	Saskatoon	-

SHA & Affiliate Vacancies (as of April 1, 2024)

	8
Permanent	Temporary
4	4
North	0
South	0
Regina	4 (50%)
Saskatoon	4 (50%)

SCA Vacancies (as of April 1, 2024)

	2024-25	2025-26	2026-27	2027-28	2028-29
Supply Components	Count ³	Share ³	Count	Share	Count
Grads from Domestic Training Programs	-	-	-	-	-
Grads from Interprovincial Training Programs	0	-	0	-	2
In-migrated Health Professionals ²	0	-	0	-	0
Targeted Recruitment Initiatives	0	-	0	-	0
Total Forecasted Supply	0		2		2
Demand Components					
Vacancies ²	4	44%	9	75%	12
Capital Projects	0	-	0	-	0
Attrition (Resignations, Retirements and Other Terminations)	2	22%	2	17%	2
Population Growth	0	-	1	8%	1
New Public Commitments	3	33%	0	-	0
Total Forecasted Demand	9		12		15
Estimated Gap	-9		-12		-13
					-15
					-16

¹Data is not available from the regulator.

²Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³Proportions may not add up to 100 and count may not sum up to totals due to rounding.

HIGH PRIORITY

Training Program Entry Prerequisites:

- Minimum of one year (10 single-semester courses) of university education with a minimum CGPA of 2.70 (B-) AND successful completion of one single-semester course in each of the following pre-requisite subjects – Biology, Mathematics, Physics and Social Science.

Training Program Length (Credential Type):

- 3 years (Advanced Diploma)

Labour Force Attachment Rate:

- 100%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
Michener Institute (Toronto)	2	100%
Total	2	

Payroll Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.24

Other Labour Force Considerations:

- Currently, the Saskatchewan Cancer Agency (SCA) purchases its own training seats.
- Radiation therapy is a specialized occupation employed only by the SCA.



Recreation Therapists

Unregulated

Develop, plan, organize, validate and deliver programs to enhance the holistic care of clients/patients/residents (mental, emotional, physical, spiritual and cultural).



74

Payroll (Public) 55 (74%)
Non-payroll (Private) 19 (26%)

Estimated Headcounts (as of March 31, 2024)



\$3K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

Permanent	Temporary	North	South	Regina	Saskatoon	3 (100%)
		0	0	0	3	
2	1					

SHA & Affiliate Vacancies (as of April 1, 2024)

Permanent	Temporary	North	South	Regina	Saskatoon	N/A
		N/A	N/A	N/A	N/A	
-	-	-	-	-	-	-

SCA Vacancies (as of April 1, 2024)

	2024-25	2025-26	2026-27	2027-28	2028-29					
Supply Components	Count ³	Share ³	Count	Share	Count	Share				
Grads from Domestic Training Programs	17	100%	21	100%	15	100%				
Grads from Interprovincial Training Programs	-	-	-	-	-	-				
In-migrated Health Professionals ¹	0	-	0	-	0	-				
Targeted Recruitment Initiatives	0	-	0	-	0	-				
Total Forecasted Supply	17		21		15		25		21	
Demand Components										
Vacancies ²	2	5%	22	88%	4	57%	0	-	0	-
Capital Projects	9	23%	0	-	0	-	0	-	0	-
Attrition (Resignations, Retirements and Other Terminations)	2	5%	2	8%	2	29%	2	67%	2	67%
Population Growth	2	5%	1	4%	1	14%	1	33%	1	33%
New Public Commitments	24	62%	0	-	0	-	0	-	0	-
Total Forecasted Demand	39		25		7		3		3	
Estimated Gap	-22		-4		8		22		18	

¹Occupation is not regulated.

²Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³Proportions may not add up to 100 and count may not sum up to totals due to rounding.

MEDIUM PRIORITY

Training Program Entry Prerequisites:

- Direct entry from high school.

Training Program Length (Credential Type):

- Saskatchewan Polytechnic: 71 weeks (Diploma)
- University of Regina: 4 years (Bachelor's degree)

Labour Force Attachment Rates:

- Saskatchewan Polytechnic: 41%
- University of Regina: 80%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
Saskatchewan Polytechnic (Saskatoon)	27	77%
University of Regina (Regina)	23	63%
Total	50	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.18

Other Labour Force Considerations:

- Students in their final clinical placements are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon.



Registered Nurses/Registered Psychiatric Nurses¹

MEDIUM PRIORITY

Regulated - College of Registered Nurses of Saskatchewan

Observe, monitor and document patients' symptoms and progress, administer medication, assist other health-care team members with procedures, and educate patients on self-care. Areas of work include critical care, pediatrics, emergency, oncology, operating room, mental health and addictions, community health, home care and other clinical settings.

14,766 Payroll (Public) 14,031 (95%)
Non-payroll (Private) 735 (5%)

Estimated Headcounts (as of March 31, 2024)

	Permanent	Temporary	North	South	Regina	Saskatoon
	937		208 (22%)	157 (17%)	218 (23%)	354 (38%)
	856	81				

SHA & Affiliate Vacancies (as of April 1, 2024)

\$125.8M
2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	Permanent	Temporary	North	South	Regina	Saskatoon
	14		0	0	3 (21%)	11 (79%)
	11	3				

SCA Vacancies (as of April 1, 2024)

	2024-25	2025-26	2026-27	2027-28	2028-29	
Supply Components	Count ²	Share ³	Count	Share	Count	Share
Grads from Domestic Training Programs	535	54%	536	76%	497	74%
Grads from Interprovincial Training Programs	-	-	-	-	-	-
In-migrated Health Professionals	170	17%	172	24%	175	26%
Targeted Recruitment Initiatives	287	29%	0	-	0	-
Total Forecasted Supply	992		708		672	
					726	
					780	
Demand Components						
Vacancies ²	867	50%	743	61%	509	54%
Capital Projects	70	4%	79	6%	70	7%
Attrition (Resignations, Retirements and Other Terminations)	218	13%	222	18%	226	24%
Population Growth	243	14%	173	14%	145	15%
New Public Commitments	337	19%	0	-	0	-
Total Forecasted Demand	1,735		1,217		949	
					929	
					595	
Estimated Gap	-743		-509		-277	
					-203	
					186	

¹ The data for RNs are grouped together with RPNs as the payroll system does not have unique job codes for RPNs.

² Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³ Proportions may not add up to 100 and count may not sum up to totals due to rounding.

Training Program Entry Prerequisites:

- B.S.N: Completion of pre-professional year - A minimum average of 60% in the [pre-professional classes](#).
- Post degree RN: Four-year degree.
- RPN: Direct entry from high school.

Training Program Length (Credential Type):

- RN: 2 years (Post-Degree Bachelor's) or 4 years (Bachelor's Degree), RPN: 96 weeks (Diploma)

Labour Force Attachment Rates:

- RN – 89%, RPN – 91%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
University of Saskatchewan – Bachelor's (Lle-a-la-Crosse, La Ronge, Lloydminster, Prince Albert, Regina, Saskatoon, Yorkton)	342	78%
University of Saskatchewan – Post-Degree Nursing (Saskatoon)	65	53%
University of Regina/Saskatchewan Polytechnic – Bachelor's (Regina)	410	71%
University of Regina – Post-Degree Nursing (Regina)	21	150%
RN Total	838	
Saskatchewan Polytechnic – RPN (Online, Regina, Saskatoon)	72	85%
North West College – RPN (North Battleford)	32	86%
RPN Total	104	
RN/RPN TOTAL	942	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.22

Other Labour Force Considerations:

- Students in their final clinical placements are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon.
- RNs/RPNs who accept a permanent full-time position in a rural or remote location are eligible for a \$50K rural and remote incentive in exchange for a three-year return of service.
- In 2024-25, 333.6 RN/RPN FTEs are required to support public commitments and capitals projects including but not limited to ambulance and emergency services, breast health, kidney health and organ tissue donation and transplantation services, the Regina urgent care centre, cancer services, and mental health and addictions services.,
- In 2024-25, the government has added 24 RN seats at U of R/SaskPoly and 24 RPN seats at SaskPoly (16) and North West College (8). This builds upon the 124 RN seats and 24 RPN seats added in 2022-23 as part of the 150 nursing seat expansions announced in 2022.



Respiratory Therapists

Regulated – Saskatchewan College of Respiratory Therapists

MEDIUM PRIORITY

Evaluate people who have breathing problems and provide treatment and care using oxygen, medicines, and advanced mechanical technology measures and equipment such as ventilators. They work in hospital settings such as Intensive Care Units (ICU), Neonatal ICU, Pediatric ICU, Emergency Departments, Critical Care Units, and other hospital wards, community care settings and clinical care.



271
Payroll (Public) 237 (87%)
Non-payroll (Private) 34 (13%)

Estimated Headcounts (as of March 31, 2024)

\$2.8M

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	16	North 3 (19%)
Permanent		South 6 (38%)
Temporary		Regina 5 (31%)
		Saskatoon 2 (13%)

SHA & Affiliate Vacancies (as of April 1, 2024)

	N/A	North N/A
Permanent		South N/A
Temporary		Regina N/A
		Saskatoon N/A

SCA Vacancies (as of April 1, 2024)

	2024-25		2025-26		2026-27		2027-28		2028-29	
Supply Components	Count ²	Share ²	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	-	-	-	-	-	-	-	-	-	-
Grads from Interprovincial Training Programs	5	42%	6	46%	6	46%	8	57%	8	57%
In-migrated Health Professionals	8	67%	7	54%	7	54%	7	50%	6	43%
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	12		13		13		14		14	
Demand Components										
Vacancies ¹	16	64%	13	38%	20	51%	25	60%	27	66%
Capital Projects	0	-	7	21%	5	13%	2	5%	0	-
Attrition (Resignations, Retirements and Other Terminations)	9	36%	9	26%	10	26%	10	24%	10	24
Population Growth	0	-	4	12%	4	10%	4	10%	4	10%
New Public Commitments	0	-	0	-	0	-	0	-	0	-
Total Forecasted Demand	25		34		39		42		41	
Estimated Gap	-13		-20		-25		-27		-27	

¹ Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast

² Proportions may not add up to 100 and count may not sum up to totals due to rounding.

Training Program Entry Prerequisites:

- Direct entry from high school.
- Applicants must achieve at least 50% in the School of Health and Public Safety's entrance testing process.

Training Program Length (Credential Type):

- 3 years (Diploma)

Labour Force Attachment Rate:

- 58%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
Southern Alberta Institute of Technology (Calgary)	20	74%
Total	20	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.22

Other Labour Force Considerations:

- Students in their final clinical placements are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon.
- 6 seats will be added to the 14 at SAIT in the 2024-25 academic year as part of the 550 seat expansions announced in January 2023, making a total of 20 seats.
- The government also announced a new domestic Respiratory Therapy program anticipated to launch Fall 2026 with an annual intake of 20.
- Respiratory therapists may choose to transition to other occupations including but not limited to anaesthesia assistants.

Profile 41: Social Workers



Social Workers

Regulated - Saskatchewan Association of Social Workers

LOW PRIORITY

Provide emotional support and help people locate and access services and programs, function in their environment, improve their relationships with others, and solve personal and family problems. They can provide individual counseling, resource navigation and facilitate and develop support groups. Social workers may work in a hospital, community organization, or private counselling.



1342 Payroll (Public) 631 (47%)
Non-payroll (Private) 711 (53%)

Estimated Headcounts (as of March 31, 2024)

\$148K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

Permanent	Temporary	North	South	Regina	Saskatoon
36	3	8 (21%)	3 (8%)	12 (31%)	16 (41%)

SHA & Affiliate Vacancies (as of April 1, 2024)

Permanent	Temporary	North	South	Regina	Saskatoon
2	-	0	0	1 (50%)	1 (50%)

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ³	Share ³	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	213	100%	180	100%	194	100%	194	100%	194	100%
Grads from Interprovincial Training Programs	-	-	-	-	-	-	-	-	-	-
In-migrated Health Professionals ²	0	-	0	-	0	-	0	-	0	-
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	213		180		194		194		194	
Demand Components										
Vacancies ²	38	20%	0	-	0	-	0	-	0	-
Capital Projects	3	2%	2	4%	0	-	3	6%	0	-
Attrition (Resignations, Retirements and Other Terminations)	32	16%	33	67%	34	74%	34	65%	35	73%
Population Growth	11	6%	15	31%	12	26%	14	27%	13	27%
New Public Commitments	109	56%	0	-	0	-	0	-	0	-
Total Forecasted Demand	194		49		46		52		48	
Estimated Gap										
	19		130		148		143		146	

¹Data is not available from the regulator.

²Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

³Proportions may not add up to 100 and count may not sum up to totals due to rounding.

Training Program Entry Prerequisites:

- 30 credit hours of the Pre-Social Work program.

Training Program Length (Credential Type):

- 4 years (Bachelor's degree)

Labour Force Attachment Rate:

- 97%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
University of Regina (Regina)	392	93%
Total	392	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.18

Other Labour Force Considerations:

- Students in their final clinical placements are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon.
- In 2024-25, 95 social worker FTEs are required to support capital projects and multiple public commitments including acute care bed capacity, patient flow and Emergency Department stability, the Breast Health Centre of Excellence, Maternal and Children's Programs – pediatric gastrointestinal, operating the Regina Urgent Care Centre, Enhanced Gynecological High Dose Rate Brachytherapy at the Saskatchewan Cancer Agency, mental health capacity building and other Mental Health and Addictions services, and Community, Intermediate and Continuing Care Services.



Speech Language Pathologists

Regulated – College of Speech-Language Pathologists and Audiologists of Saskatchewan

LOW PRIORITY

Treat patients with communication and swallowing problems including problems with speech sounds, language and literacy, social communication, voice, fluency and feeding. They work in a variety of environments including private clinics, physician offices, hospitals, schools, colleges and universities, and rehabilitation centres such as long-term health care facilities and community clinics.



412
Payroll (Public) 127 (31%)
Non-payroll (Private) 285 (69%)

Estimated Headcounts (as of March 31, 2024)

\$125K

2023-24 Overtime Compensation Expenditure
(3sHealth Payroll Only)

	20	North 13 (65%)	South 6 (30%)	Regina 1 (5%)	Saskatoon 0
Permanent	19				
Temporary	1				

SHA & Affiliate Vacancies (as of April 1, 2024)

	-	North -	South -	Regina -	Saskatoon -
Permanent	-				
Temporary	-				

SCA Vacancies (as of April 1, 2024)

Supply Components	2024-25		2025-26		2026-27		2027-28		2028-29	
	Count ²	Share ²	Count	Share	Count	Share	Count	Share	Count	Share
Grads from Domestic Training Programs	-	-	-	-	-	-	-	-	30	37%
Grads from Interprovincial Training Programs	0	-	8	22%	10	24%	13	28%	13	16%
In-migrated Health Professionals	26	100%	29	78%	31	76%	34	72%	38	47%
Targeted Recruitment Initiatives	0	-	0	-	0	-	0	-	0	-
Total Forecasted Supply	26		37		41		47		81	
Demand Components										
Vacancies ¹	19	29%	40	73%	19	56%	0	-	0	-
Capital Projects	0	-	0	-	1	3%	2	11%	0	-
Attrition (Resignations, Retirements and Other Terminations)	9	14%	9	16%	9	26%	10	56%	10	67%
Population Growth	36	55%	6	11%	5	15%	6	33%	5	33%
New Public Commitments	2	3%	0	-	0	-	0	-	0	-
Total Forecasted Demand	66		55		34		18		15	
Estimated Gap	-40		-19		7		29		66	

¹ Only permanent FT and PT vacant positions as of April 1, 2024 (SHA & Affiliates and SCA) are included in the forecast.

² Proportions may not add up to 100 and count may not sum up to totals due to rounding.

Training Program Entry Prerequisites:

- Four-year undergraduate degree.
- Completion of 7 prerequisite courses. Individuals with an undergraduate degree in Speech-Language Pathology or Speech and Hearing Sciences are not exempt from prerequisites.

Training Program Length (Credential Type):

- 2 years (Master's degree)

Labour Force Attachment Rate:

- 75%

Training Institution Location(s)	Annual Seat Intake (2024-25)	Graduation Rate (3-yr Avg.)
University of Alberta (Edmonton)	20	100%
Total	20	

SHA Headcount to FTE Ratio (5-yr Avg.)

- Ratio used to convert FTEs to counts: 1.21

Other Labour Force Considerations:

- Students in their final clinical placements are eligible for a \$2K bursary in exchange for a one-year return-in-service in a location outside Regina and Saskatoon.
- In 2024-25, 5 new seats were secured at the University of Alberta and 5 more are expected to be added in 2025-26, which will make a total of 25 seats. These seats are part of the 550 seat expansions announced in January 2023.
- The government also announced the development of a domestic program anticipated to begin Fall 2025, with a first-year intake capacity of 40.

SECTION 3: DETAILED INFORMATION AND NOTES

Table 2: Training programs and first year intake by occupation

Occupation	Length of Training	Institution	2024-25 First Year Intake Capacity	Seat Expanded Since 2022-23
Addictions Counsellors	80 weeks	Sask Polytech /Regional Colleges	197	Y
Advanced Care Paramedics	71 weeks	Sask Polytech	32	N
Anaesthesia Assistants ¹	-	-	-	-
Audiologists ¹	-	-	-	-
Cardiology Technologists	2 years (IPA)	BCIT	5	Y
Cardiopulmonary Function Technologists ¹	-	-	-	-
Cardiovascular Technologists ¹	-	-	-	-
Clinical Genetics Technologists ¹	-	-	-	-
Combined Lab & X-Ray Technicians	97 weeks	Sask Polytech	30	N
Continuing Care Assistants	32 weeks	Sask Polytech /Regional Colleges	855	Y
Diagnostic Cardiac Sonographers	2.5 years (IPA)	NAIT	6	Y
Diagnostic Medical Sonographers	28 months (domestic), 2.5 years (IPA)	Suncrest College & SAIT	22	Y
Dietitians	4 years	U of S	28	N
Dosimetrists ¹	-	-	-	-
Electro-Neurophysiology Technologists	2 years (IPA)	BCIT	2	Y
Health Cooks	39 weeks	Sask Polytech /Regional Colleges	78	N
Health Information Management Practitioners	71 weeks	Sask Polytech	35	N
Health Records Clerks ¹	-	-	-	-
Licensed Practical Nurses	76 weeks	Sask Polytech /Regional Colleges	306	Y
Magnetic Resonance Imaging Technologists	2 years (IPA)	NAIT	7	Y
Medical Laboratory Assistants	32 weeks	Sask Polytech /Suncrest College	27	Y
Medical Laboratory Technologists	104 weeks	Sask Polytech	60	Y
Medical Physicists ¹	-	-	-	-
Medical Radiation Technologists	2.5 years	Sask Polytech	40	Y
Mental Health Therapists ¹	-	-	-	-
Nuclear Medicine Technologists	22 months (IPA)	SAIT	4	Y
Nurse Practitioners	2 years	U of S & U of R	65	Y
Nutritionists	4 years	U of S	28	N
Occupational Therapists	26 months (IPA)	U of A	25	Y
Perfusionists	2 years (IPA)	BCIT	1	Y
Pharmacists	4 years	U of S	90	N
Pharmacy Technicians	51 weeks	Sask Polytech	48	Y
Physical Therapists	2 years	U of S	55	Y
Primary Care Paramedics	51 weeks	Sask Polytech /Regional Colleges	228	Y
Psychologists	5 years (PhD), 2 years (MSc)	U of S & U of R	25	Y
Public Health Inspectors	16 months (IPA)	CUE	2	Y
Radiation Therapists	3 years (IPA)	Michener Institute	2	N
Recreation Therapists	71 weeks, 4 years	Sask Polytech & U of R	50	N
Registered Nurses/Registered Psychiatric Nurses	RN - 2 years, 4 years; RPN – 96 weeks	U of S, U of R, Sask Polytech, North West College	942	Y
Respiratory Therapists	3 years (IPA)	SAIT	20	Y
Social Workers	4 years	U of R	392	N
Speech Language Pathologists	2 years (IPA)	U of A	20	Y

¹There are no training programs for the occupations without data. However, graduates from the social work program are sometimes employed as mental health therapists.

Source: Data shown above was obtained directly from the post-secondary institutions except for regional colleges data which was provided by the Ministry of Immigration and Career Training and IPA data which was provided by the Ministry of Advanced Education.

Table 3: Training Seat Expansion Since 2022-23

A: 2022 Nursing Seat Expansion								
Institution	Training Programs	Pre-expansion 2021-22 1st year Seats	Post-expansion 2022-23 1st year Seats	# of Seats Filled 2023-24 1st year Seats	Expansion Location	Year Expansion Fully Implemented	Expected Graduation Year	
Nursing Seat Expansion								
U of R*	Registered Nursing	345	407	407	Regina/ Saskatoon	2023-24	2027	
	Nurse Practitioner	20	25	25	Online	2023-24	2025	
U of S	Registered Nursing	345	407	331	Saskatoon	2023-24	2027	
	Nurse Practitioner	20	25	25	Online	2023-24	2025	
Sask Polytech*	Registered Nursing	345	407	407	Regina/ Saskatoon	2023-24	2027	
	Nurse Practitioner	20	25	25	Online	2023-24	2025	
	Registered Psychiatric Nursing	32	56	80	Regina/ Saskatoon	2023-24	2026	
Nursing Seat Expansion Totals		762	920					
*Please note, U of R/Sask Polytech jointly deliver the RN/NP seats. Seat numbers should not be counted separately.								
B: Health Human Resources (550) Seat Expansion Details								
Universities, Sask Polytech and IPAs								
	Training Programs	Pre-expansion 2022-23 1st year Seats	First Year of Expansion 2023-24			Post-expansion 2024-25 1st year Seats	Expansion Locations	Year Expansion Fully Implemented
2023 Announcement								
U of R	Clinical Psychology	6	10	4	4/4	14	Regina	2029-30
U of S	Clinical Psychology	5	7	2	2/2	11	Saskatoon	2027-28
	Physical Therapy	40	55	15	15/15	55	Saskatoon	2023-24
Sask Polytech	Continuing Care Assistant	145	173	28	28/28	173	Saskatoon (12) and PA (16)	2023-24
	Licensed Practical Nursing	96	110	14	14/14	110	PA	2023-24
	Medical Laboratory Assistant	16	21	5	3/5	21	Saskatoon	2023-24
	Medical Laboratory Technologist	40	50	10	8/10	60	Saskatoon with Regina locations being discussed	2024-25
	Medical Radiologic Technologist	20	28	8	8/8	40	Saskatoon with Regina locations being discussed	2024-25
	Mental Health and Addictions Counsellor	35	51	16	17/16	51	Online+ four 1-week onsite labs	2023-24
	Pharmacy Technician	24	48	24	7/24	48	Saskatoon	2023-24
	Primary Care Paramedic	128	192	64	56/56	192	Regina (32) Saskatoon (32)	2023-24
	Magnetic Resonance Imaging Technology	0	7	7	7/7	7	Edmonton (NAIT)	2023-24
	Respiratory Therapy	12	14	2	0/2	20	Calgary (SAIT)	2024-25
IPA	Diagnostic Medical Sonography	8	16	8	8/8	16	Calgary (SAIT)	2023-24
	Electroneurophysiology	2	2	0	2/2	2	Vancouver (BCIT)	2023-24
	Perfusion	0	2	1	1/1	1	Online (BCIT)	2023-24
	Occupational Therapy	20	25	5	4/5	25	Edmonton (UofA)	2023-24
	Speech Language Pathology	0	15	15	10/15	20	Edmonton (UofA)	2025-26 with 25 seats
	Prosthetics and Orthotics	2	N/A	N/A	N/A	N/A	Vancouver (BCIT)	No Expansion
	Nuclear Medicine Technology	2	N/A	N/A	N/A	N/A	Calgary (SAIT)	No Expansion (Until HHR 2.0)
Regional Colleges								

	Implemented 2023-24						Expected Graduation Year
	Training Program	Program Capacity	Total Enrolments	Fill Rate	Location (Institution)		
Regional Colleges	Continuing Care Assistant	14	8	57%	Wakaw (Carlton Trail College)		2024
	Continuing Care Assistant	14	11	79%	Prince Albert (Dumont Technical Institute)		2024
	Continuing Care Assistant (PT)	12	12	100%	Swift Current (Great Plains College)		2024
	Continuing Care Assistant	13	13	100%	North Battleford (North West College)		2024
	Continuing Care Assistant	15	n/a*	N/A	Air Ronge (Northlands College)		2025
	Health Care Aide	20	13	65%	SIIT (Saskatoon)		2024
	Continuing Care Assistant	14	9	64%	Assiniboia (Southeast College)		2024
	Continuing Care Assistant	19	19	100%	Melfort (Suncrest College)		2024
	Continuing Care Assistant	24	22	92%	Yorkton (Suncrest College)		2024
	Overall – Continuing Care Assistant	145	107	76%			
	Practical Nursing Diploma (Year 1)	14	14	100%	Prince Albert (Dumont Technical Institute)		2025
	Indigenous Practical Nurse (Year 1)	18	13	72%	Saskatoon (SIIT)		2025
	Practical Nursing Diploma (Year 1)	14	12	86%	Weyburn (Southeast College)		2025
	Overall – Practical Nursing	46	39	81%			
	Primary Care Paramedic	12	10	83%	Humboldt (Carlton Trail College)		2024
	Primary Care Paramedic	12	14	117%	Nipawin (Suncrest College)		2024
	Primary Care Paramedic**	12	12	100%	Melville (Suncrest College)		2025
	Overall – Primary Care Paramedic	36	36	100%			

Source: STA Enrollment Data as of January 31, 2024

* Program deferred to 2024-25 (start date September 5, 2024) due to instructor recruitment challenges.

** Starts May 2024.

C: New Programs (Regional Colleges)

	Training Program	Program Capacity	Total Enrolments	Location (Institution)	Program Launch Date	Expected Graduation Year
	Diagnostic Medical Sonography	6	-	Yorkton (Suncrest College)	2024-25	2027
	Medical Lab Assistants	6	6	Yorkton (Suncrest College)	2023-24	2024

D: Health Human Resources (2024-25 Budget) Seat Expansion Details

	Training Program	Pre-expansion 2023-24 1 st Year Seats	Seat Increase Number	Post-expansion 2024-25 1 st Year Seats	Expansion Location	Year Expansion Fully Implemented	Expected Graduation Year
U of R	Registered Nursing	407 (See Nursing)	24	431	Regina	2024-25	2029
Sask Polytech	Registered Nursing	407 (See Nursing)	24	431	Regina	2024-25	2029
	Registered Psychiatric Nursing	56 (See Nursing)	16	72	Regina	2024-25	2027
North West	Registered Psychiatric Nursing	24	8	32	North Battleford	2024-25	2027
IPA	Nuclear Medicine Technology	2	2	4	Calgary (SAIT)	2024-25*	2026
	Environmental Public Health	0	4	4	TBD	TBD	
	Diagnostic Medical Sonography (Cardiac Stream)	0	6	6	Edmonton (NAIT)	2024-25*	2027
	Cardiology Technology	0	5	5	Vancouver (BCIT)	2024-25*	2026

*Additional seats may be negotiated for Nuclear Medicine Technology, Diagnostic Medical Sonography (Cardiac Stream) and Cardiology Technology in future years.

NOTE: Training seat expansion information was provided by the Ministry of Advanced Education in May 2024.

Table 4: New Domestic Programs

Program	Anticipated Program Launch Date	Capacity	Enrollment Assumptions - 1 st year seats of domestic program when it launches	Enrollment Assumptions - 1 st year IPA seats in year domestic program launches	Domestic Graduates assumption/year	IPA Graduates assumption/year based on current agreements
Speech Language Pathology – 2-year Masters	Fall 2026	80 by Fall 2027: 1 st year – 40, 2 nd year – 40	40	25	40 in 2028	10 in 2025 (based on current enrollment) 20 in 2026 25 in 2027 25 in 2028 25 in 2029 (IPA ends)
Occupational Therapy – 2-year Masters	Fall 2026	80 by Fall 2027: 1 st year – 40, 2 nd year – 40	40	25	40 in 2028	24 in 2025 (based on current enrollment) 25 in 2026 25 in 2027 (no IPA yet) 25 in 2028 (no IPA yet)
Physician Assistant Studies – 2-year Masters	Fall 2025	40 by Fall 2027: 1 st year – 20, 2 nd year – 20	20	N/A	20 in 2026	No IPA
Respiratory Therapy – 3-year Advanced Diploma	Fall 2026	60 by Fall 2028: 1 st year – 20, 2 nd year – 20, 3 rd year – 20	20	20	20 in 2029	12 in 2025 (based on current enrollment) 20 in 2026 20 in 2027 (no IPA yet) 20 in 2028 (no IPA yet)

Source: Data provided by the Ministry of Advanced Education in May 2024.

Table 5: Forecast Results Comparison: 2024 Update vs 2023 Update

Occupation	2024-25 (Gap)			2025-26 (Gap)			2026-27 (Gap)			2027-28 (Gap)			Variance Explanation
	2024 Update	2023 Update	Diff										
Addictions Counsellors	-44	47	-91	58	48	10	103	28	75	102	47	55	<ul style="list-style-type: none"> The 2024 model update included 2024-25 budget commitments (70 FTEs) which led to a huge demand for addictions counsellors in the first forecast year. However, reduced demand in the subsequent years coupled with the large supply (seats were expanded for this occupation) results in surpluses in those subsequent years. The 2024 update also uses quality data on training (showing 197 seats across the province) compared to 2023 update (which uses 125 for the entire province) causes the variance in the surpluses.
Advanced Care Paramedics	-25	-29	4	-24	-18	-6	-24	-6	-18	-25	4	-29	<ul style="list-style-type: none"> Improved and updated training data from Sask Polytech indicates that the 3-yr avg. graduation rates for this program were low (39% in 2024 compared to 72% in 2023), which, when incorporated into the 2024 model update results in low supply compared to the 2023 update.
Audiologists	-3	3	-6	-1	3	-4	0	3	-3	1	3	-2	<ul style="list-style-type: none"> Demand in the 2024 update is larger due to public commitments (2.4 FTEs) announced in the 2024-25 budget.
Cardiology Technologists	-15	-14	-1	-18	-20	2	-18	-24	6	-17	-28	11	<ul style="list-style-type: none"> New training seats (5 yearly intake) secured in 2024-25 will reduce the expected gaps in the 2024 update compared to 2023 update.
Cardiopulmonary Function Technologists	-1	0	-1	-2	0	-2	-2	0	-2	-2	0	-2	<ul style="list-style-type: none"> Vacancy numbers included in the 2024 forecast update (1) compared to the 2023 update (0) led to the differences in results.
Cardiovascular Technologists	-5	-2	-3	-6	-2	-4	-7	-3	-4	-8	-3	-5	<ul style="list-style-type: none"> The increase in demand in the 2024 forecast update is mostly due to the new initiative (Cardio sciences – Specialized services) announced in the 2024-25 budget which were not present in the 2023 update.
Clinical Genetics Technologists	-2	-2	0	-2	-3	1	-3	-4	1	-3	-4	1	<ul style="list-style-type: none"> Results are very close.
Combined Lab & X-Ray Technicians	3	20	-17	19	4	15	14	4	10	12	3	9	<ul style="list-style-type: none"> The 3-yr avg. labour force attachment rate in the 2024 update (93%) is higher than the 2023 update (71%) due to higher numbers reported by Sask Polytech in the recent update of the Graduate Retention Survey. This makes the supply from the 2024 model update slightly higher than 2023's update.
Continuing Care Assistants	-671	88	-759	-663	244	-907	-634	105	-739	-1310	206	-1516	<ul style="list-style-type: none"> Improved training data on the CCA program from ICT and Sask Polytech for the 2024 model update ensures that supply is not over estimated. The supply in the 2024 update is low (over 100 less each year) compared to 2023 for each of the comparable forecast years. Public commitments announced in the 2024-25 budget and Capital builds, including 188 FTEs for Regina LTC Standard beds to be implemented in 2024-25, and 582 FTEs for Regina LTC specialized beds in 2027-28, also contribute to the variances between the 2023 and 2024 update results by generating large demands for CCAs. Applying a 1.23 ratio to these FTEs increases demand significantly.
Cooks	-123	-24	-99	-137	-25	-112	-148	-27	-121	-161	-35	-126	<ul style="list-style-type: none"> Capital builds FTEs included in the 2024 update for Regina LTC standard beds, Grenfell LTC and Regina UCC, led to a higher demand than reported in the 2023 forecast update. The large gap created by increased demand are carried over to subsequent years and in turn create substantial variances between the results of the 2024 and 2023 forecast updates for comparable years.
Diagnostic Cardiac Sonographers	-13	-10	-3	-13	-11	-2	-14	-13	-1	-9	-14	5	<ul style="list-style-type: none"> The 2024 update includes new training seats (6 yearly intake) to be secured in 2024-25, which will increase supply reduces the gaps in the 2024 update compared to the 2023 update.
Diagnostic Medical Sonographers	-17	-21	4	-20	-31	11	-18	-26	8	-10	-21	11	<ul style="list-style-type: none"> The differences are mostly due to the addition of new training seats at Suncrest College to be fully implemented in the 2024-25 academic year. These new seats are included in the 2024 update.
Dietitians	1	-8	9	8	-16	24	8	-19	27	3	-22	25	<ul style="list-style-type: none"> In-migration numbers that were absent from the 2023 forecast update were included in the 2024 update.
Electro-Neurophysiology Technologists	-11	-4	-7	-10	-4	-6	-9	-3	-6	-9	-2	-7	<ul style="list-style-type: none"> The 2024 model update includes 2024-25 budget commitments requiring this occupation (6.1 FTEs) that did not exist at the time of the 2023 update. Consequently, there is a rise in the demand for this occupation in the 2024 update.
Health Information Management Practitioners	-21	1	-22	-25	2	-27	-26	6	-32	-29	5	-34	<ul style="list-style-type: none"> A big decline in the FTEs from 2023-24 fiscal and 2022-23 fiscal resulted in the population factor adjusting sharply in the first forecast year of the 2024 update. Also, Sask Polytech reported lower numbers in the recent update of the Graduate Retention Survey, which resulted in a lower labour force attachment rate in the 2024 update (61% in 2024 & 88% in 2023), and therefore, a lower supply than in 2023.

Licensed Practical Nurses	-116	125	-241	71	185	-114	196	195	1	26	184	-158	• The 2024 update uses improved data for supply, thereby reducing supply overestimations that were present in the 2023 update. • The 2024 forecast also accounts for the expected huge demand for LPNs in 2027-28 to staff the Regina specialized beds (240).
Magnetic Resonance Imaging Technologists	-23	-18	-5	-19	-32	13	-15	-41	26	-10	-45	35	• The 2023 forecast update included staffing numbers for capital builds. These numbers were omitted from data submission on capital builds received for the 2024 forecast update causing the difference in results.
Medical Laboratory Assistants	-29	-61	32	-30	-92	62	-33	-83	50	-41	-83	42	• The staffing numbers for the Regina and Saskatoon UCC were overestimated in 2023 compared to the approved numbers included in the 2024 update. Consequently, the 2024 update shows a lower demand for MLAs.
Medical Laboratory Technologists	-59	-81	22	-52	-121	69	-46	-104	58	-38	-82	44	• The full implementation of the 20 additional seats in 2024-25 (for total of 60 intake) accounts for majority of the variance as it increases supply. This assumption was omitted from last year's forecast update due to uncertainties around the expansion. Only the confirmed implemented 10 seats were included in the 2023 update.
Medical Radiation Technologists	-60	-72	12	-56	-92	36	-46	-73	27	-48	-55	7	• The full implementation of the 20 additional seats in 2024-25 (for total of 40 intake) accounts for majority of the variance. This assumption was omitted from last year's forecast update due to uncertainties around the expansion. Only the confirmed implemented 8 seats were included in the 2023 update.
Mental Health Therapists	4	39	-35	28	38	-10	32	38	-6	32	38	-6	• New initiatives in the 2024-25 budget that require 21.9 FTEs caused a higher demand in the 2024 forecast update than in the 2023 update.
Nuclear Medicine Technologists	-6	-3	-3	-6	-3	-3	-5	-4	-1	-4	-5	1	• Results are very close.
Nurse Practitioners	-30	45	-75	5	30	-25	30	31	-1	31	31	0	• Almost 30 new NP positions were added to the system during the 2023-24 fiscal year leading to a high number of vacancies (51) for the first forecast year of the 2024 forecast update, and therefore, a higher demand for NPs. The gap is of the first forecast year is carried forward into the subsequent year which creates a higher demand as well. This results in lower surplus in 2025-26 forecast year. However, the results of subsequent years is similar to the results of the 2023 forecast update.
Nutritionists	-3	-4	1	-5	-5	0	-7	-6	-1	-9	-8	-1	• Results are very close.
Occupational Therapists	-45	-26	-19	-31	-21	-10	-17	-3	-14	-8	14	-22	• The variance here is mainly driven by the changes in the treatment of in-migration. The 2024 forecast uses a method that captures the historically declining trend in the in-migration of OTs over the years. • Compared to the 2023 update that used an arithmetic average, we see a lower forecasted supply which then translates into higher gaps for this occupation in the 2024 update.
Perfusionists	-2	1	-3	-2	1	-3	-2	-1	-1	-1	0	-1	• Results are very close
Pharmacists	18	17	1	46	8	38	44	42	2	28	34	-6	• Refined numbers included in the 2024 forecast for public commitments and capital builds (21.9 FTEs) change the demand in the 2024 forecast compared to 2023's update.
Pharmacy Technicians	-27	-15	-12	-19	-27	8	-1	-4	3	10	10	0	• The improved training data availability and understanding ensured that the supply forecast in the 2024 update was conservative compared to the 2023 update where data was limited.
Physical Therapists	-44	-11	-33	-15	1	-16	13	25	-12	16	20	-4	• The improved training data availability and understanding ensured that the supply forecast in the 2024 update was conservative compared to the 2023 update where data was limited.
Primary Care Paramedics	-17	9	-26	119	169	-50	137	161	-24	135	159	-24	• A good understanding and improved availability of training data ensured that the supply forecast was more conservative in the 2024 update compared to 2023 where data was severely limited.
Psychologists	-86	-73	-13	-91	-86	-5	-96	-92	-4	-99	-100	1	• The difference in the first comparable forecast year is 13 (counts) psychologists needed to fulfill government commitments from the 2024-25 budget that was included in the 2024 update. The results of the subsequent years are close enough.
Public Health Inspectors	-17	-25	8	-23	-30	7	-29	-35	6	-36	-41	5	• A smaller number of vacancies (4) were included in the 2024 update compared to 2023 (10).
Recreation Therapists	-22	9	-31	-4	9	-13	8	19	-11	22	18	4	• FTEs included in the 2024 update for 2024-25 budget commitments (27.9 FTEs) caused a higher demand in the 2024 forecast update than in the 2023 update.
Registered Nurses/Registered Psychiatric Nurses	-743	-1124	381	-509	-1038	529	-277	-653	376	-203	-339	136	• In the 2023 forecast update, large gaps in the first forecast year contributed to the gaps in the subsequent years. With success in recruitment activities, the 2024 forecast update's first forecast year starts in a relatively better place which reduces the gaps that are carried over to subsequent years compared to the 2023 update. • In addition, returns from the increases in RPN seats and RN seats in 2024/25 academic year improve the supply from 2027-28 (RPNs).
Respiratory Therapists	-13	-63	50	-20	-97	77	-25	-94	69	-27	-86	59	• Reduced vacancies included in the 2024 model (16 compared to 21 in 2023) means a smaller gap is carried over from the first forecast year compared to the 2023 forecast.

Social Workers	19	118	-99	130	112	18	148	128	20	143	132	11	• In the 2024 update, actual enrolment was used in determining graduates entering the labour market for 2024-25 and 2025-26, leading to considerable supply shrinkage for these two years in the 2024 model compared to last year's update. This data wasn't available during the 2023 update.
Speech Language Pathologists	-40	-4	-36	-19	11	-30	7	24	-17	29	22	7	• A big decline in the FTEs from 2023-24 fiscal and 2022-23 fiscal resulted in the population factor adjusting sharply in the first forecast year of the 2024 update to catch up with the rate of population growth. • Combined with other factors and zero grads, a large gap is estimated in the first forecast year. This gap is carried over into subsequent years but begins to improve as the IPA program starts producing grads to supplement the in-migration.
NOTE: Some occupations were newly added/introduced to the forecast in the 2024 update, and as a result, are not included in this table as there are no 2023 forecast data for comparison. These occupations include anaesthesia assistants, dosimetrists, health records clerks, medical physicists, and radiation therapists.													

Table 6a: Summary Headcounts of Capital Builds by Occupation, Facility and Year

	2024-25						2025-26				2026-27			2027-28			2028-29		
	Regina UCC	Grenfell LTC	La Ronge LTC	Regina LTC Standard Beds (64 spaces)	Regina LTC Standard Beds (140 spaces)	Total	La Ronge LTC	P.A. Victoria Hospital	ICU Expansion of RUH	Total	La Ronge LTC	P.A. Victoria Hospital	Total	Saskatoon UCC	P.A. Victoria Hospital	Regina LTC Specialized Beds (240 beds)	Total	P.A. Victoria Hospital	Total
Occupation																			
Continuing Care Assistants		20		66	165	251	30		5	35	37		37			716	716		0
Cooks	3	3		21	56	83				0			0				0		0
Diagnostic Medical Sonographers	3					3			2	2		2	2	3			3		0
Dietitians						0			1	1			0				0		0
Health Information Management Practitioners	1					1				0			0	2			2		0
Licensed Practical Nurses		4		8	21	33	6			6	9		9		31	141	172	1	1
Medical Laboratory Assistants	7					7			0	0	2		2	7			7	9	9
Medical Laboratory Technologists	3					3				0		13	13	6	12		18		0
Medical Physicists						0				0			0				0		0
Medical Radiation Technologists	8					8			0	0		3	3	8	16		24		0
Nurse Practitioners						0				0	1		1				0		0
Occupational Therapists						0			1	1	2	2	4		1	6	7		0
Pharmacists	2					2			1	1			0	2	9		12		0
Pharmacy Technicians	3					3			3	3			0	3	2		5	5	5
Physical Therapists						0			1	1	1	3	5		3	12	16	12	12
Recreation Therapists				3	7	9				0			0				25		0
Registered Nurses/Registered Psychiatric Nurses	46	7	2	5	9	70	6	20	54	79	3	67	70	64	134	59	256	2	2
Respiratory Therapists						0			7	7		5	5		2		2		0
Social Workers	3					3			2	2			0	3			3		0
Speech Language Pathologists						0				0	1		1		2		2		0
TOTAL	78	34	2	103	258	476	42	20	75	137	56	96	152	98	219	963	1,246	29	29

Notes: Not all occupations included in the forecast appear on this list. Occupations appearing in this table are those occupations that were identified as having capital builds FTE implications.

Table 6b: Summary FTEs of Capital Builds by Occupation, Facility and Year

	2024-25						2025-26				2026-27			2027-28				2028-29		
	Regina UCC	Grenfell LTC	La Ronge LTC	Regina LTC Standard Beds (64 spaces)	Regina LTC Standard Beds (140 spaces)	Total	La Ronge LTC	P.A. Victoria Hospital	ICU Expansion of RUH	Total	La Ronge LTC	P.A. Victoria Hospital	Total	Saskatoon UCC	P.A. Victoria Hospital	Regina LTC Specialized Beds (240 beds)	Total	P.A. Victoria Hospital	Total	
Occupation																				
Continuing Care Assistants		16.61		53.71	134.27	204.59	24.00		4.18	28.18	30.00		30.00			582.00	582.00		0.00	
Cooks	1.87	2.43		15.30	41.63	61.23				0.00			0.00				0.00	0.00		0.00
Diagnostic Medical Sonographers	1.87					1.87			1.26	1.26		2.00	2.00	1.87			1.87			0.00
Dietitians						0.00			0.63	0.63			0.00				0.00	0.00		0.00
Health Information Management Practitioners	1.34					1.34				0.00			0.00	1.87			1.87			0.00
Licensed Practical Nurses		3.04		6.75	16.88	26.67	5.00			5.00	7.14		7.14		25.00	115.00	140.00	0.84	0.84	
Medical Laboratory Assistants	5.62					5.62			0.00	0.00	1.93		1.93	5.62			5.62	7.74	7.74	
Medical Laboratory Technologists	2.70					2.70				0.00	12.00	12.00	5.62	11.00		16.62			0.00	
Medical Physicists						0.00				0.00			0.00				0.00	0.00		0.00
Medical Radiation Technologists	5.62					5.62			0.00	0.00	2.00	2.00	5.62	12.00		17.62			0.00	
Nurse Practitioners						0.00				0.00	1.00		1.00				0.00	0.00		0.00
Occupational Therapists						0.00			0.63	0.63	1.25	2.00	3.25		1.00	5.00	6.00		0.00	
Pharmacists	1.87					1.87			0.94	0.94			0.00	1.87	8.00		9.87			0.00
Pharmacy Technicians	2.76					2.76			2.76	2.76			0.00	2.76	2.00		4.76	4.00	4.00	
Physical Therapists						0.00			0.63	0.63	1.00	2.63	3.63		2.63	10.00	12.63	10.00	10.00	
Recreation Therapists				2.25	5.63	7.88				0.00			0.00				0.00	0.00		0.00
Registered Nurses/Registered Psychiatric Nurses	37.58	5.47	2.00	4.50	7.50	57.05	5.00	16.00	44.10	65.10	2.13	55.00	57.13	52.08	110.00	48.00	210.08	1.27	1.27	
Respiratory Therapists						0.00			5.51	5.51		4.00	4.00		2.00			2.00		0.00
Social Workers	2.76					2.76			1.25	1.25			0.00	2.76			2.76			0.00
Speech Language Pathologists						0.00				0.00	1.00		1.00		2.00			2.00		0.00
TOTAL	63.99	27.55	2.00	82.51	205.91	381.96	34.00	16.00	61.89	111.89	45.45	79.63	125.08	80.07	175.63	780.00	1,015.70	23.85	23.85	
Notes: Not all occupations included in the forecast appear on this list. Occupations appearing in this table are those occupations that were identified as having capital builds FTE implications.																				

Table 7: Project Completion Dates by Facility

Facility	Regina UCC	Regina LTC Standard Beds (64 spaces)	Regina LTC Standard Beds (140 spaces)	Regina LTC Specialized Beds (240 beds)	Grenfell LTC	La Ronge LTC	P.A. Victoria Hospital	Saskatoon UCC	ICU Expansion of RUH
Completion Date	July 1, 2024	July 1, 2024 (Phase 1)	July 1, 2024 (Phase 1)	Tentative - TBD	Spring 2025	Late 2026	- Sept. 2028 (New Build) Renovation - TBD	Estimated- 2027-28 fiscal year	2025-26

Methodology Notes for the 2024 Forecasting Model Update

Forecasting the demand and supply of the health workforce is a multifaceted and dynamic process that necessitates a thorough grasp of the various factors influencing the pool of healthcare professionals. Typically, demand forecasting involves estimating the additional healthcare providers required to deliver services, whereas supply forecasting estimates the available healthcare providers to meet the demand.

The Health Human Resources (HHR) forecasting model estimates the difference (shortage or surplus) between the anticipated demand for and supply of healthcare professionals. The most recent HHR forecast update includes 42 occupations and spans a five-year period, from 2024-25 to 2028-29.

The sections below provide a detailed description of the approach employed in forecasting the demand and supply of the health workforce.

FACTORS OF DEMAND

Demand = Vacancies + Capital Projects + New Public Commitments + Attritions + Population Growth

Vacancies

- For the first forecast year, permanent full-time and part-time vacancies at the beginning of the new fiscal year (April 1) in the SHA, affiliates and SCA are used:
 - Temporary vacancies are excluded as these may arise from temporary absences and the personnel for these positions are considered part of the workforce pool and expected to return.
 - The ministry continues to work with the SHA and SCA to see how best to account for (exclude) those permanent vacancies slated for internal filling which draws from existing staff, and thus, does not contribute to the overall demand for new hires. However, vacancies arising from internal churn that necessitate external candidates to backfill positions will be included.
- Subsequent forecast years will have counts for vacancies if there exists an identified shortage from the previous year resulting from demand surpassing supply.

Capital Projects / New Public Commitments

- The demand factor incorporates the workforce requirements of capital projects and new public commitments approved/announced through budgets.
- Actual and estimated (for those unknown) workforce numbers by occupation for capital projects and public commitments are solicited from the relevant program branches within the Ministry of Health in consultation with the SHA and incorporated into the forecasting model. This approach recognizes the different stages of development of announced/approved capital projects and public commitments.
- The current updates of the forecast will not include/account for capital projects and public commitments that may be announced in future budgets but unknown at the time of forecasting. The forecast model does not predict the announcements of future capital projects and public commitments.

Attritions

- The forecasting model estimates replacement demand due to attritions, including both retirements and resignations, by using five-year historical data sourced from the 3sHealth payroll system.
 - Resignation: A resignation rate, which is calculated by analyzing the 5-year historical trend (i.e 2019-20 to 2023-24), is applied to the projected workforce size in the forecast years.
 - Retirement: The model calculates the retirement rate for the different age groups of “30-44”, “45-49”, “50–54”, “55–59”, “60–64”, and “65+” by analyzing data from the past five years. Afterwards, the model applies a similar method to Statistics Canada’s cohort-component model where assumptions are made about the future (5-year) evolution of each of these age components in the next five years. The respective retirement rates are then applied to the projected workforce for each age category in the next 5 years to estimate anticipated retirements in the future years.

Population Growth

- The rate of population growth is based on the projected population covered under Saskatchewan’s health insurance plan. This information is made available by the Acute and Emergency Services Branch of the Ministry of Health whose primary sources of data are eHealth Saskatchewan and Statistics Canada.

- The model calculates the 5-year average workforce per capita, and then applies this rate to the projected population. This approach estimates the necessary number of healthcare workforce members needed to preserve the current workforce per capita ratio over the next 5 years.

Notes:

- Figures and computations executed for the factors listed above are occupation-specific.
- For regulated occupations, employment outside of the public payroll is estimated from licensing data from regulators. For unregulated occupations, these computations are done using employment data from the Canadian Institute of Health Information (CIHI) or Statistics Canada's Labour Force Survey.
- Initial computations on the demand side of the model are done in FTE and then converted to headcounts using occupation-specific headcount-to-FTE ratio. This ratio is derived from historical FTE and employee count data sourced from SHA, excluding casual employees.

FACTORS OF SUPPLY

Supply = Graduates from Domestic Training Programs and/or Graduates from Interprovincial Training Programs + In-Migrated Health Professionals + Targeted Recruitment Initiatives

Graduates from Domestic Training Programs

- Forecasted graduates entering the Saskatchewan health labour market from domestic training programs are calculated by applying historical graduation rates and labour force attachment rates to the currently available number of enrolled students or available seats.
- The graduation rate is calculated using the five-year historical number of enrolments and the three-year historical number of graduates. Rates are computed separately for programs delivered by the Universities and Sask Polytech. Due to data limitations, rates are computed collectively by program delivered in the regional colleges and three years of data is used.
- Historical number of graduates from domestic programs, number of training seats and numbers for expanded training seats are sourced directly from post-secondary institutions and the Ministry of Immigration and Career Training.
- To determine labour market attachment rates of graduates, surveys conducted by post-secondary institutions are utilized. In future model updates, considerations will be given to estimating these rates by comparing number of graduates to number of new licenses for regulated occupations.

Graduates from Interprovincial Training Programs

- Forecasted graduates entering the Saskatchewan health labour market from seats reserved through interprovincial agreements (IPAs) is calculated using historical graduation rates and labour force attachment rates.
- Number of reserved seats and enrolled students are provided by the Ministry of Advanced Education.
- Graduation rates are computed by program using historical enrolment and number of graduates. As majority of IPA occupations are regulated, historical labour force attachment rates are determined by the Ministry of Advanced Education by matching IPA student names with online registries for those occupations that are regulated.

In-Migrated Health Professionals

- The estimated influx of health professionals moving to Saskatchewan from out-of-province is estimated based on a compound annual growth rate of historical in-migration data provided by regulatory bodies for regulated occupations. This approach smoothens the effect of volatility of periodic values.

Targeted Recruitment Initiatives

- This factor accounts for the supply of workers that is expected from the targeted recruitment initiatives (Philippines Missions, Ukrainian recruits, and other overseas/national recruitments of Internationally Trained Health Professionals).
- Professionals that have received conditional employment offers and are at the different stages of their bridging process but not working in the system yet are included in the forecasting model. This data is obtained through consultations with HHRB and the SHRA.

GAP = SUPPLY - DEMAND

- A Gap is the difference between forecasted supply and demand. A negative value indicates an anticipated shortage of workers, while a positive value indicates a surplus.
- Forecasted deficits from previous years are carried over to the subsequent year as vacancies. This assumes that unfilled shortages will persist and accordingly should be added to next year's demand.
- The gap in a given year is cumulative of the gaps from 2024-25 to the given year. Therefore, **the gap in each year should not be added up separately and averaged.**

Notes:

- Any surpluses do not carry over in a similar fashion as the shortages do, as the model assumes that any excess supply of workers will relocate out of the province or to another sector to find employment.
- Despite future surpluses being forecasted for some occupations in current update of the forecast, future initiatives, which are currently not identifiable but may be introduced/announced in year or in subsequent budgets, will influence demand and may lead to estimated deficits in subsequent update of the forecast.

Table 8: Record of Modifications to the 2024-25 Update of the HHR Forecasting Model's Methodology and Data Specification

Factors	2023 Forecast Update Methods	Modifications to 2024 Forecast Update Methods
		Demand
Vacancies	<i>Only permanent full time and part time vacant positions of the SHA were included in the model.</i>	<i>2024's update includes permanent full time and part time vacant positions of the SHA, Affiliates and the SCA.</i>
New Capital Projects/Public Commitments	<i>Actual and estimated (for those unknown) workforce numbers by occupation are solicited from the relevant program branches within the Ministry of Health in consultation with the SHA and incorporated into the forecasting model.</i>	<i>Same approach.</i>
Attrition	<p>Resignation: A resignation rate, which is calculated by analyzing the 5-year historical trend (i.e 2019-20 to 2023-24), was applied to the projected workforce size in the forecast years</p> <p>Retirements: A 5-year retirement rate was applied to the projected workforce size in the 55+ age category.</p>	<p>Resignation: Same approach.</p> <p>Retirements: 2024's update calculates a 5-year retirement rate for the different age groups of "30-44," "45-49," "50-54," "55-59," "60-64," and "65+" and employs a method similar to Statistics Canada's cohort-component model where assumptions are made about the future (5-year) evolution of each of these age components. Then, the respective retirement rates are applied to each age category's projected workforce size for the next 5 years to estimate anticipated retirements in the future years. Resulting numbers are then sent to the model.</p>
Population Growth	<i>The model calculates the 5-year average workforce per capita, and then applies this rate to the projected population made available by the Acute and Emergency Services Branch. This approach estimates the necessary number of healthcare workforce members needed to preserve the current workforce per capita ratio over the next 5 years.</i>	<i>Same approach.</i>
Supply		
Graduates from Domestic Training Programs	<p>Enrolment Rates: Due to data constraints, 2023's update estimated enrolments rates were based on the total available seats and enrolments by occupation.</p> <p>Graduation Rates: Graduation rates were also computed by occupation using the total enrolment numbers and graduates (all institutions combined)</p> <p>Labour force attachment rates: Sask Polytech's and the Universities' graduate retention surveys were used.</p>	<p>Enrolment Rates: Due to the richness of data received directly from the institutions for 2024's update, enrolments rates (5-year averages and 3-years for regional colleges) were estimated by program for each institution or within institution where applicable, except for regional colleges where these rates were computed collectively for the institutions due to data restrictions.</p> <p>Graduation Rates: Similarly, the graduation rates (3-year averages) were estimated by program.</p> <p>Labour force attachment rates: Sask Polytech's and the Universities' graduate retention surveys were used.</p> <p>This year's method aimed to accurately represent the nuances of the training data. To illustrate the nuances of the computations for 2024's update, the RN/RPN example is presented below:</p> <ol style="list-style-type: none"> 1. Enrolment rates are computed separately for programs in the different institutions. For RN, it is computed separately for UofR and Uofs. For RPN, it is computed separately for Sask Polytech and Northwest College. 2. Since the universities divide their RN seats across the 4-year bachelor's degree and the 2-year After-degree programs, enrollment rates are computed separately for these programs as well. 3. Same approached is employed in determining graduation rates. 4. In computing how many students will graduate, graduation rates and actual first enrolments for the years known as well estimated enrolments for years unknown are used. This is computed separately for the 4-year bachelor's degree and the 2-year After-degree programs in the UofS and the UofR as well as separately for the RPN program in Sask Polytech and Northwest College. 5. Once estimated graduates are determined by different programs in the same institution or different institutions, the labour force attachment rates of RNs and RPNs are applied separately.

		<p><i>The resulting number which indicates the number of grads expected in the labour market is combined and moved into the forecast model.</i></p> <p><i>This approach minimizes the chances of overestimating the supply.</i></p> <p><i>For new seats in regional colleges for which no historical data exists, ICT was relied on to provide assumptions around enrolment and graduation rates.</i></p>
Graduates from Interprovincial Training Programs	<p>Enrolment Rates: 2023's update estimated historical enrolments rates based on total available seats and enrolment by programs (occupations).</p> <p>Graduation Rates: Graduation rates were also computed by occupations which in this case is the same as the program.</p> <p>Labour force attachment rates: Determined by the Ministry of Advanced Education by matching IPA student names with online registries for those occupations that are regulated.</p>	<p>Enrolment Rates: Same approach except for new IPAs that have no historical data. In such cases, AE was relied on to provide assumptions on enrolment rates based on their understanding and experience of the sector.</p> <p>Graduation Rates: Same approach except for new IPAs that have no historical data. In such cases, AE was relied on to provide assumptions on enrolment rates based on their understanding and experience of the sector.</p> <p>Labour force attachment rates: Same approach as 2023's update.</p>
In-Migrated Health Professionals	Projected using a 5-year historical average of in-migration.	Projected using the compound annual growth rate method to smoothen the effect of volatility of periodic values and overcome the limitations of using a historical arithmetic mean (simple avg).
Targeted Recruitment Initiatives	Recruitment targets were used, and for those targets where occupations to be recruited were unknown, eligible occupations for the Saskatchewan Rural and Remote Recruitment Incentives were used as a proxy to determine the occupations. Then, SHA's vacancies were used to allocate the numbers associated with the occupations.	In the absence of clear guidance around several different factors including occupations, timing of hiring and occupation specific numbers to be hired, 2024's update includes recruits that have received conditional employment offers and are at the different stages of their bridging process but not working in the system yet.

Methodology Notes for Priority Grouping

In recent years, HHR planning has evolved beyond simple supply-demand forecasting to incorporate dynamic planning models, acknowledging the reality that addressing all shortages simultaneously is impractical. These models integrate forecast results with health system knowledge, experience, and empirical evidence to strategically guide the allocation of scarce resources.

This planning approach has proven more effective than static planning based solely on demand-supply gap analysis. To effectively prioritize government resource allocation, six (6) key variables are considered. These variables encompass the implications of current and potential labour challenges, existing government commitments, and overtime expenditures.

These six (6) variables and the rationale for their selection are explained below.

1. Projected gap relative to the size of the workforce – This factor is crucial in prioritizing HHR as it assesses the impact of shortages on the workforce and, consequently, the potential challenges faced by the system in delivering services. Calculated as the gaps identified in the first forecast year divided by the workforce size, this metric enables a focused assessment of immediate labour challenges.
2. Proportion of the current forecast year workforce close to retirement age – Professionals nearing retirement age are used as a proxy to highlight the potential for an upcoming wave of retirements. This is calculated as the number of workers aged 55 or older divided by the total workforce size, prioritizing potential retirees.
3. System vacancies relative to workforce size – Vacancies relative to the workforce size are used to judge the system's progress in recruiting professionals. Including this variable ensures that focus is given to occupations that have existing recruitment challenges.
4. Impact on service levels from unexpected resignations or retirements – Due to the different workforce sizes for different occupations, this variable is included in prioritizing HHR to highlight the severity of the impacts on service levels from unexpected departures. This ensures that occupations with smaller workforce size but crucial to service delivery are given the same importance as occupations with larger workforce sizes.
5. Critical in meeting hiring needs and government commitments – The rationale for the inclusion of this variable is simply to ensure that emphasis is placed on meeting the immediate business objectives of the government and employers' hiring needs. Occupations identified by the Ministry of Health's program branches and the various employers as being critical are given higher priority.
6. Overtime compensation – This factor is included to focus attention on the system's mammoth expenditure on overtime compensation payments. Greater priority is given to occupations with larger overtime compensation payments as eliminating those will greater savings to the system, providing funds to be used elsewhere to deliver more services.

The table below presents the formulars and weights associated with these six (6) variables to prioritize:

Formulas Associated with the Six (6) variables and Weights Assigned to Them in Prioritizing HHR

Criteria	Measure/Metric	Scoring Scale	Weight (%)	Source of Data
Projected 2024-25 gap relative to the size of the workforce	$\frac{\text{Projected gap}}{\text{Total workforce size}}$	< 20 th percentile = 1 20 th to < 40 th = 2 40 th to < 60 th = 3 60 th to < 80 th = 4 > 80 th percentile = 5	20	Forecast result
Proportion of the 2023-24 workforce close to retirement age	$\frac{\text{Aged 55 workforce}}{\text{Total workforce size}}$	< 20 th percentile = 1 20 th to < 40 th = 2 40 th to < 60 th = 3 60 th to < 80 th = 4 > 80 th percentile = 5	10	3sHealth payroll
2023-24 vacancies relative to size of the workforce	$\frac{\text{Total Vacancies}}{\text{Total workforce size}}$	< 20 th percentile = 1 20 th to < 40 th = 2 40 th to < 60 th = 3 60 th to < 80 th = 4 > 80 th percentile = 5	10	SHA, Affiliates & SCA/ 3sHealth payroll
Impact on service levels from unexpected resignations or retirements	$\frac{\text{Hypothetical and unexpected departure of a single position}}{\text{Total workforce size}}$	< 20 th percentile = 1 20 th to < 40 th = 2 40 th to < 60 th = 3 60 th to < 80 th = 4 > 80 th percentile = 5	25	3sHealth payroll
Critical in meeting hiring needs and government commitments	Critical / non-critical	Occupation not identified as critical = 1 Identified by one (1) group as critical = 3 Identified by both groups as critical = 5	25	Survey of Ministry of Health program branches and employers (SHA, SHRA, SCA and Affiliates)
Overtime compensation	Total overtime compensation in 2023-24	< 20 th percentile = 1 20 th to < 40 th = 2 40 th to < 60 th = 3 60 th to < 80 th = 4 > 80 th percentile = 5	10	3sHealth payroll

Priority Segmentation and Context: The distribution of the weighted scores, calculated from these six factors, are utilized to segment the 42 occupations into three priority categories. These categories are high (*weighted score above the 75th percentile score*), medium (*weighted score is from the median score to the 75th percentile score*), and, and low priority (*less than median weighted score*).

Categorizing occupations into high, medium, and low priorities avoids suggesting that one occupation is more crucial than another and respects the nuanced differences between occupations which sometimes requires more qualitative information, especially for projects with specific contexts.

Table 9: Record of Modifications to the 2024-25 Matrix for Priority Groupings

Record of Modifications to the 2024-25 Matrix of Priority Rankings		
Inputs	2023 Priority Ranking Methods	2024 Priority Ranking Methods
Key variables considered	Five (5) key variables were included in the rankings - projected gap relative to the size of the workforce, proportion of workforce close to retirement age, vacancies relative to the size of the workforce, impact on service levels from unexpected resignations or retirements, and critical occupations in meeting government commitments.	In addition to the five key variables, overtime compensation has been added to capture the system's expenditure on overtime compensation payments, recognizing that, eliminating overtime payments will lead to savings and free up resources to be used elsewhere in delivering more services.
Projected gap relative to the size of the workforce	This factor was in 2023's prioritization considered the ramifications of shortages on the workforce in the longer term and therefore was computed as gaps from the fifth forecast year divided by the workforce size'	To prioritize immediate labour challenges and for the rankings to guide recruitment efforts, gaps from the first forecast year is used instead of the fifth forecast year.
Proportion of workforce close to retirement age	2023's prioritization took into account professionals considered close to retirement as a proxy to focus attention on the possibility of an impending wave of retirements. This was computed as workforce aged 55 or older divided by workforce size, a greater priority is given to potential retirees.	Same approach.
Vacancies relative to the size of the workforce	2023's prioritization used only the vacancies and workforce size of occupations in the SHA due to data limitations.	The prioritization focuses on all vacancies in the system instead of just the SHA as was the case in 2023. 2024 matrix used all vacancies in the SHA, Affiliates and the SCA. Total headcounts from the SHA, Affiliates and the SCA is used as the workforce size.
Impact on service levels from unexpected resignations or retirements	2023's prioritization included severity of the impacts on service levels from unexpected departure computed as the reciprocal of the workforce size for each occupation.	Same approach.
Critical in meeting hiring needs and government commitments	This variable was included to ensure that emphasis is placed on meeting the immediate business objectives of the government. Occupations identified by the Ministry of Health's program branches as being critical are given higher priority.	In addition to the business needs of the government, the hiring needs of employers are also emphasized in the rankings. This variable now captures the hiring needs of employers in addition to the business needs of the government.
Weights assigned to each variable included in the rankings	The five (5) variables included in 2023's prioritization were assigned weights as follows: Projected gap relative to the size of workforce - 20% System vacancies relative to workforce size - 10% Workforce close to retirement age - 10% Impact on service levels from unexpected resignations or retirements - 30% Critical in meeting government commitments - 30%	With the introduction of overtime compensation, 2024's prioritization uses the weights distribution below: Projected gap relative to the size of workforce - 20% System vacancies relative to workforce size - 10% Workforce close to retirement age - 10% Impact on service levels from unexpected resignations or retirements - 25% Critical in meeting hiring needs and government commitments - 25% Overtime compensation - 10%
Scoring Scale	A 3-point scale was used to assign scores to each factor and an overall weighted score was calculated. The scoring scales used for each of the factors were: Projected gap relative to workforce size - < -10% = 3; 0 - 10% = 2; > 10% = 1 Proportion of workforce close to retirement age - > 20% = 3; 10% - 20% = 2; < 10% = 1 Vacancies relative to workforce size - > 5% = 3; 5% - 2% = 2; < 2% = 1 Impact on service levels from unexpected resignations or retirements - > 2% = 3; 0.5% - 2% = 2; < 0.5% = 1 Critical in meeting government commitments - identified as critical = 3; identified as non-critical = 1	2024's prioritization assigns scores between 1 to 5 depending on where the rates computed for each of the variables falls, where 1 is the lowest and 5 is the highest. These scores are assigned for each occupation considering the percentile rank of the computed rates as illustrated below: less than 20th percentile - 1 20th percentile to less than 40th percentile - 2 40th percentile to less than 60th percentile - 3 60th percentile to less than 80th percentile - 4 80th percentile and above - 5 The variable that considers the criticality of occupations in meeting government commitments and hiring needs of employers also uses an extended 5-point scoring scale. This scale is however based on the responses received from employers both and program branches of the ministry of health.
Priority Segmentation	Occupations were segmented into three priority categories namely high (score of 2.1 to 2.6), medium (score of 1.5 to 2.0) and low (score of 1.0 to 1.4). The segmentation ensured a clear and even distribution of occupations based on their scores.	Similarly, occupations are segmented into three priority categories: high priority (weighted score is above the 75th percentile score), medium priority (weighted score is from the median score to the 75th percentile score), and, and low priority (less than median weighted score).

Table 10: List of Occupations and Their Scores Grouped by Priority Category

Priority	Occupation	Gap relative to workforce size	Retirement Bubbles	Vacancies relative to workforce size	% of Impact on Workforce if Losing 1 Staff	Identified Priorities by Employers and Gov't	Overtime Compensation	Overall
High	Perfusionists	5	5	1	5	5	3	4.4
	Medical Physicists	5	2	5	5	5	1	4.3
	Anaesthesia Assistants	5	1	5	5	3	2	3.8
	Diagnostic Cardiac Sonographers	5	1	4	5	3	1	3.6
	Cardiopulmonary Function Technologists	5	5	5	5	1	1	3.6
	Magnetic Resonance Imaging Technologists	5	1	4	4	3	3	3.55
	Psychologists	4	5	2	2	5	3	3.55
	Radiation Therapists	4	3	5	4	3	2	3.55
	Electro-Neurophysiology Technologists	5	3	5	5	1	2	3.5
	Nurse Practitioners	3	4	5	3	3	4	3.4
Medium	Cardiology Technologists	5	4	3	4	1	4	3.35
	Cardiovascular Technologists	4	2	4	4	3	2	3.35
	Occupational Therapists	3	2	5	2	5	3	3.35
	Medical Radiation Technologists	3	1	4	2	5	5	3.35
	Respiratory Therapists	1	1	4	3	5	5	3.2
	Registered Nurses/Registered Psychiatric Nurses	2	3	4	1	5	5	3.1
	Clinical Genetics Technologists	4	2	5	5	1	1	3.1
	Medical Laboratory Technologists	3	5	2	2	3	5	3.05
	Nutritionists	4	5	1	5	1	1	3
	Health Records Clerks	4	4	5	3	1	3	3
	Recreation Therapists	5	4	2	4	1	1	2.95
	Public Health Inspectors	4	5	2	4	1	2	2.95
Low	Dosimetrists	4	3	1	5	1	2	2.9
	Licensed Practical Nurses	1	3	4	1	5	5	2.9
	Medical Laboratory Assistants	3	4	3	3	1	5	2.8
	Continuing Care Assistants	1	5	1	1	5	5	2.8
	Diagnostic Medical Sonographers	2	2	2	3	3	4	2.7
	Speech Language Pathologists	3	2	3	2	3	3	2.65
	Advanced Care Paramedics	2	3	2	2	3	4	2.55
	Audiologists	2	5	3	4	1	1	2.55
	Nuclear Medicine Technologists	3	1	3	4	1	2	2.45
	Health Information Management Practitioners	2	4	2	3	1	4	2.4
	Pharmacy Technicians	2	1	2	2	3	4	2.35
	Combined Lab & X-Ray Technicians	1	3	4	3	1	4	2.3
	Physical Therapists	2	2	3	1	3	3	2.2
	Health Cooks	3	5	1	1	1	5	2.2
	Mental Health Therapists	1	4	3	3	1	2	2.1
	Primary Care Paramedics	1	2	3	1	1	5	1.7
	Addictions Counsellors	2	4	1	1	1	1	1.5
	Social Workers	1	3	1	1	1	3	1.4
	Pharmacists	1	1	1	1	1	4	1.3
	Dietitians	1	1	1	2	1	1	1.25

Table 11: List of Occupations and their scores Grouped by Training Program Availability

	Occupation	Gap relative to workforce size	Retirement Bubbles	Vacancies relative to workforce size	% of Impact on Workforce if Losing 1 Staff	Identified Priorities by Program Branches	Overtime Compensation	Overall
Domestic training programs available	Psychologists	4	5	2	2	5	3	3.55
	Nurse Practitioners	3	4	5	3	3	4	3.40
	Medical Radiation Technologists	3	1	4	2	5	5	3.35
	Registered Nurses/Registered Psychiatric Nurses	2	3	4	1	5	5	3.10
	Medical Laboratory Technologists	3	5	2	2	3	5	3.05
	Nutritionists	4	5	1	5	1	1	3.00
	Recreation Therapists	5	4	2	4	1	1	2.95
	Licensed Practical Nurses	1	3	4	1	5	5	2.90
	Medical Laboratory Assistants	3	4	3	3	1	5	2.80
	Continuing Care Assistants	1	5	1	1	5	5	2.80
	Advanced Care Paramedics	2	3	2	2	3	4	2.55
	Health Information Management Practitioners	2	4	2	3	1	4	2.40
	Pharmacy Technicians	2	1	2	2	3	4	2.35
	Combined Lab & X-Ray Technicians	1	3	4	3	1	4	2.30
	Physical Therapists	2	2	3	1	3	3	2.20
	Health Cooks	3	5	1	1	1	5	2.20
	Primary Care Paramedics	1	2	3	1	1	5	1.70
	Addictions Counsellors	2	4	1	1	1	1	1.50
	Social Workers	1	3	1	1	1	3	1.40
	Pharmacists	1	1	1	1	1	4	1.30
	Dietitians	1	1	1	2	1	1	1.25
Inter-Provincial Agreement (IPA)	Perfusionists	5	5	1	5	5	3	4.40
	Diagnostic Cardiac Sonographers	5	1	4	5	3	1	3.60
	Magnetic Resonance Imaging Technologists	5	1	4	4	3	3	3.55
	Radiation Therapists	4	3	5	4	3	2	3.55
	Electro-Neurophysiology Technologists	5	3	5	5	1	2	3.50
	Cardiology Technologists	5	4	3	4	1	4	3.35
	Occupational Therapists	3	2	5	2	5	3	3.35
	Respiratory Therapists	1	1	4	3	5	5	3.20
	Public Health Inspectors	4	5	2	4	1	2	2.95
	Diagnostic Medical Sonographers	2	2	2	3	3	4	2.70
No training programs	Speech Language Pathologists	3	2	3	2	3	3	2.65
	Nuclear Medicine Technologists	3	1	3	4	1	2	2.45
	Medical Physicists	5	2	5	5	5	1	4.30
	Anaesthesia Assistants	5	1	5	5	3	2	3.80
	Cardiopulmonary Function Technologists	5	5	5	5	1	1	3.60
	Cardiovascular Technologists	4	2	4	4	3	2	3.35
	Clinical Genetics Technologists	4	2	5	5	1	1	3.10
	Health Records Clerks	4	4	5	3	1	3	3.00

Saskatchewan Health Human Resource Forecast Model Questions and Answers

Introduction

Q.1. Why forecast for Health Human Resources (HHR) in Saskatchewan?

A.1. Forecasting HHR is crucial for effectively allocating scarce government resources, keeping in mind that there are more HHR challenges than government can address at once. Forecasting generates insights into various HHR gaps and facilitates the identification of leverage points for action.

Forecast results combined with health system knowledge and expertise allow for a more approximate determination of the extent and immediacy of HHR shortages and provide adequate direction on where government resources should be invested.

Q.2. Who are the users of the Saskatchewan HHR Forecast results, and how are the forecast results used?

A.2. The forecast results are a valuable resource for the Ministries of Health (MoH), Advanced Education (AE), Immigration and Career Training (ICT), and the Saskatchewan Health Authority (SHA). It will also be a valuable tool for the new Saskatchewan Healthcare Recruitment Agency in its role to recruit and retain health professionals from within Saskatchewan, nationally and internationally.

In the past, these ministries and the SHA, working collaboratively within the Saskatchewan Health Human Resource Partnership (SHHRP), have used the forecast results as a guide to recommend and operationalize training, recruitment, retention and incentive strategies based on identified HHR gaps.

Technical Approach to Forecasting

Q.3. What was the historical approach to forecasting? How was the model developed?

A.3. A team of 26 members, comprising officials from the ICT, AE, former regional health authorities, Saskdocs, and a host of academics from the University of Saskatchewan, University of Regina and Saskatchewan Polytechnic collaboratively began producing [HHR Demand and Supply forecasting before 2018](#). The methods included forecasting demand due to annual replacement of employees lost to termination or retirement using historical averages and workforce growth rate that aligned with provincial population projections or the historical 9-year average of the workforce. Supply was forecasted based on graduates from training programs.

The same group of organizations (with about 20 members) started producing an [Annual Report on Health Human Resource Priorities](#) under the banner of the Saskatchewan Academic Health Sciences Network (SAHSN) which included demand and supply analysis. Demand forecasting at the time included:

- Projecting loss due to retirement and termination
- Estimating workforce needed to keep up projected Saskatchewan population (assumption used was that workforce-to-population ratio would remain the same for the next five years as it had been in the last year), or estimating workforce needed to keep pace with the growth of the workforce in the last 3 years (assumption here was that there will be no drastic change in health care delivery over the next five years and therefore workforce will continue in the same pattern as the growth in the past)
- Employee headcount to FTE ratio was used to transform analysis from FTEs to headcounts.
- Proportion of workforce on 3sHealth payroll system combined with licensing data was used to determine the workforce in the non-publicly funded side of the system.

Supply forecasting in this report included:

- Graduates entering the Saskatchewan labour market from training programs.

A relative ranking method was used to compare the occupations included in the forecasting (more details in the attached report).

Q.4. What is the approach taken to build the Saskatchewan HHR Forecast Model?

A.4. The HHR forecast model uses the most reliable, relevant and up-to-date data and research from sources including 3sHealth payroll, AE, ICT, SHA, program branches of MoH and various regulatory bodies to estimate gaps (shortages or surpluses) for 42 occupations. The gaps represent the difference between the estimated demand and supply. The model is broken down into an SHA-specific HHR forecast model and a provincial HHR model.

The same methodology is applied to both models. To arrive at the gaps (shortages or surpluses) for each year, the forecasted supply is subtracted from the forecasted demand.

While the SHA HHR forecast model focuses on forecasting HHR gaps for just the SHA, the provincial model forecasts HHR gaps for the entire province. Therefore, the result of the provincial forecast includes health professionals who work in the sectors outside of the SHA, its affiliates and SCA.

Q.5. What factors affect supply, and how are these factors forecasted?

A.5. Supply in the HHR model refers to professionals who are eligible to practice in a particular year and were not employed in the province in the previous year. Three main factors act to expand the supply of a particular occupation: graduates entering the health labour market from domestic and IPA programs, in-migration of ready-to-work health professionals flowing into the province, and internationally trained health professionals recruited through specific missions/programs.

Graduates entering the labour market are forecasted using historical data on seat allocation, enrolments, graduate numbers, planned seat expansions, and graduate retention rates provided by the Post-Secondary Institutions (PSI), AE and ICT. In the case of the SHA forecast model, these datasets are combined with the historical number of new hires in the SHA to determine the estimates.

The in-migration of health professionals to the province is an estimate derived from the 5-year in-migration compound annual growth rate. Data is provided by various regulatory bodies. Therefore, data is only available for regulated occupations included in the forecast.

Internationally trained health professionals recruited via missions or programs are accounted for according to the set target for each mission or program.

Q.6. What are the variables influencing demand for occupations, and how are these variables forecasted for future years?

A.6. Demand in the HHR model refers to vacancies that must be filled to maintain existing health services and staff new positions created to meet needs for health service expansions. Demand is estimated as the incremental workforce needed due to population growth, resignations and retirements, workforce requirements for public commitments and capital projects, vacancies, and the resulting forecast gaps between the previous year's supply and demand.

Incremental workforce needs due to population growth are forecasted by combining population projections provided by AESB and historical paid FTE data on 3sHealth payroll for health professionals. The anticipated replacement for professionals at risk of retirement is forecasted using Statistics Canada's cohort-component method. Resignee replacements are forecasted based on historical resignation rates for the different occupations.

Information on HHR needs for newly announced capital projects and public commitments is collected through consultations with MoH program branches **and the SHA** and applied to the forecast accordingly. **Permanent full-time and part-time** vacancies are captured in the model with the recognition that they represent the unmet demand from previous years before the first forecast year. Data is provided by the SHA, Affiliates and the SCA as at April 1 of the forecast update year to reflect those vacancies from the previous year.

For the provincial forecast model, an attempt is made to capture the demand on the private delivery side of the health system. To do this, membership data received from regulatory bodies is combined with the public system's employee count information to determine how much of the labour force lies outside the public system. For unregulated occupations, insights are drawn by combining Canadian Institute for Health Information reports, Statistics Canada's Labour Force Survey results provided by ICT, and the public system's employee count information.

Lastly, the resulting gap between supply and demand from the previous year is carried forward, assuming unfulfilled needs will become next year's demand and still need to be met to deliver the right care.

Q.7. Vacancies can vary on any given day. Are there plans to change the methodology from vacancies on single day to a yearly average?

A.7. The Ministry is open to looking for ways to improve and have looked at this idea in the past. Under consideration is using the average of the last month of the fiscal year. That means that vacancies for each day of the month will be needed to be able to find that average. However, the Ministry can also explore looking at an average of the entire year.

Either option would require support from the SHA and SCA, or perhaps AIMS may provide access to that daily vacancy data. It will be helpful to circle back to this idea once MoH and its partners have a better understanding of what data can be gotten from AIMS.

Q.8. How are occupations for the forecast chosen, and what occupations are included?

A.8. Forty-two (42) occupations are considered in the model. Occupations were selected based on occupations for which data existed on the 3sHealth payroll as well as those identified by the SHA as hard-to-recruit. The list of occupations is reviewed every year as part of the update of the forecast, and new occupations are added as needed. The full list of occupations can be seen below.

Addiction Counsellors	Dosimetrists ¹	Occupational Therapists
Advanced Care Paramedics	Electro-Neurophysiology Technologists	Perfusionists
Anaesthesia Assistants ¹	Health Information Management Practitioners	Pharmacists
Audiologists	Health Records Clerks ¹	Pharmacy Technicians
Cardiology Technologists	Licensed Practical Nurses	Physical Therapists
Cardiopulmonary Function Technologists	Magnetic Resonance Imaging Technologists	Primary Care Paramedics
Cardiovascular Technologists	Medical Laboratory Assistants	Psychologists
Clinical Genetics Technologists	Medical Laboratory Technologists	Public Health Inspectors
Combined Lab & X-Ray Technicians	Medical Physicists ¹	Radiation Therapists ¹
Continuing Care Assistants	Medical Radiation Technologists	Recreation Therapists
Health Cooks	Mental Health Therapists	Registered Nurses / Registered Psychiatric Nurses
Diagnostic Cardiac Sonographers	Nuclear Medicine Technologists	Respiratory Therapists
Diagnostic Medical Sonographers	Nurse Practitioners	Social Workers
Dieticians	Nutritionists	Speech Language Pathologists

¹Occupations added to the forecast model in 2024-25 fiscal year.

Q.9. How long are the projection years?

A.9. The Saskatchewan HHR forecast model is a 5-year forecast. Using a 5-year forecast rather than a 10-year forecast for planning minimizes the risk of error in decision making as it provides greater accuracy and more stable trends.

Q.10. How were the weight distributions for the prioritization matrix determined?

A.10. During the 2023-24 forecast update, five scenarios with different weights were presented to the HHR partners including ICT's Skills Training Branch and AE's Learning Pathways Unit. Weights were chosen through a consensus approach by the representatives. The weights settled on during that time are all documented on page 66 of the 2024-25 HHR forecast package. This year's prioritization took 5% off the weights of the variables "Impact on service levels from unexpected resignations or retirements" and "Critical in meeting hiring needs and government commitments" and apportioned it to the newly introduced "Overtime compensation" variable.

Q.11. How is the severity of impact on service level measured by the impact of unanticipated attrition on workforce size?

A.11. For occupations with a small workforce, one professional quitting has a greater impact than if a professional quits an occupation with a large workforce size.

Q.12. How does the current approach compare/differ from the historical approach and other HHR models currently applied by other jurisdictions or the private sector?

A.12. The Ministry's current HHR forecast methodology improved on the historical model by including workforce needs due to government's public commitments and capital builds (e.g., hospitals, LTC centers etc.) and vacancies on the demand side and incorporating in-migration and targeted government recruitment on the supply side.

It also improves on some of the assumptions of the earlier models. The factors included in the model are chosen based on data availability, the unique design of the healthcare system, included occupations, and needs (e.g., capital projects) specific to Saskatchewan. Due to this, the model will differ slightly from other labour demand/supply forecasting models within the healthcare space (although it generally may contain similar factors).

Most of the HHR forecasting models that exist in Canada are used for physician forecasting with some components that are applicable to other occupations. These models are adapted to suit the needs of the province/jurisdictions. The current approach to forecasting draws from, and shares similar methodologies used by the model developed collaboratively by MoH, AE, ICT, SHA, UofS, UofS and Sask Polytech and other jurisdictions such as Alberta. The model shares many similarities to Alberta's HHR model for physicians and Manitoba's model - [Exploring Models for Health Workforce Planning \(mcmasterforum.org\)](http://Exploring Models for Health Workforce Planning (mcmasterforum.org)) (See pages 10 -13). Other literature relied on to develop or improve the current HHR forecasting model includes:

- Summary in Table 1 on pages 10 – 13: [Exploring Models for Health Workforce Planning \(mcmasterforum.org\)](http://Exploring Models for Health Workforce Planning (mcmasterforum.org))
- Diagram on page 94: https://www.nivel.nl/sites/default/files/bestanden/Health workforce planning_Netherlands.pdf
- Appendix G Part B on page 79 and all of appendix H from 90: https://www.observatoriorh.org/sites/default/files/webfiles/fulltext/cameron_hrh_modelling_2010.pdf
- Summary in Table 1 on page 3 to 6: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10349158/pdf/IJMS-48-358.pdf>
- Figure 1 on page 4: <https://journals.sagepub.com/doi/pdf/10.1177/2010105820943239>

Limitations and Consultations

Q.13. Does the model make any assumptions around forecasting demand and supply? Do these assumptions introduce limitations to the model?

A.13. Like all forecasting models, the Saskatchewan HHR forecast model has inherent limitations. The results of the forecast models depend heavily on data and information that have historically been influenced by budget decisions. Examples include budgeted FTEs and training seats which have been a product of the government's willingness to spend in the past. Therefore, the model is restricted to estimating gaps based on datasets influenced by government's past decisions and not based on service utilization or patient needs.

The model is not able to estimate surpluses or shortages arising from different challenges, such as workforce distribution issues. For example, certain professions in some rural/remote communities are hard to recruit or retain despite sufficient provincial supply. Also, while the forecast model predicts a surplus of health professionals in certain regions, recruitment challenges may persist due to health professionals preferring to work in large urban centres, rather than a genuine shortage.

The forecast model is also not able to account for changes to service delivery models such as changes to scopes of practice and substituting labour for new technology. Lastly, it is not able to predict unforeseeable events such as the COVID-19 pandemic that may significantly impact workforce needs.

Q.14. Does the model take into account the population needs such as the growing and aging population, and wait times for access to health services?

A.14. While the present forecast model accounts for population growth, it does not account for the aging population and wait times. This is because the forecast predominantly focuses on budgeted positions which are driven by government decisions.

Q.15. How does the forecast differentiate overtime used in overcapacity scenarios, such as to cover sick time?

A.15. Data from the payroll is not able to split overtime expenditure, as it relates to usage to cover items like sick leave and vacancies. The goal is not to get to zero overtime but to reduce it, acknowledging that there is unpredictability especially around sick leave, which means some level of overtime is inevitable.

Q.16. Does the model capture incentives as one of the supply factors?

A.16. Incentives typically target the available supply pool which is already captured in the model. For instance, an incentive to attract IPA students into the province only guarantees the estimated supply from IPA programs which is already accounted for in the model. This implies that incentives work to provide some form of assurance that supply is not overestimated in the model. However, the forecast results can be used as a baseline in scenario analysis to explore possible scenarios where incentives guarantee a higher estimated supply than originally forecasted.

Q.17. How does the forecast account for re-entry (i.e., returns to the profession/system)?

A.17. The current HHR forecasting model accounts for these re-entries for the regulated occupations.

For regulated occupations, the regulators capture these re-entries in two ways. First, as part of the numbers considered as in-migration if the individual left the province, discontinued their practice in Saskatchewan, and returned later to re-license in Saskatchewan. Second, it is also captured as "[Other \(re-entering\)](#)" for some of the regulators – in these cases, this re-entry data point is considered when estimating the in-migration on the supply side of the forecast.

Therefore, for how the data is collected by the regulators, the HHR forecast's in-migration data includes professionals who re-enter an occupation.

The forecast however is unable to do the same for the unregulated occupations as no available data is able to trace these re-entries and in-migration for these unregulated occupations. This is a place where any suggestion on a proxy and data source will be greatly appreciated as the efforts of the ministry to track down usable data has so far not yielded tangible results.

Q.18. Does the model distinguish the number of graduates from labour force attachment rates?

A.18. Yes, a clear distinction is made between the number of graduates and the labour force attachment rate when executing the model. The labour force attachment rate gives an indication of the number of graduates from training programs who stay and work in the province. This distinction is made in the model execution to ensure supply is not overestimated.

Q.19. Are labour market findings applied to better understand the private sector demand?

A.19. The Ministry does not rely solely on regulatory bodies for an understanding of the labour market. Statistics Canada's Labour Force Surveys, CIHI's health workforce research, and other sources also inform the estimation of the private side of the market.

The Ministry, however, recognizes that for occupations such as PCPs, there are more leanings that can be made which will be beneficial for the accuracy of the forecast, as the issues regarding such occupations are not straightforward.

Q.20. How often is the forecast updated? Are there any processes in place for updating the forecast model throughout the fiscal year?

A.20. The Healthcare Human Resources Branch continues to work with partners and collaborators to determine when it is appropriate to update the model. Special considerations for updates are also made when new government initiatives are announced within the fiscal year.

Q.21. Are HHR partners consulted for feedback and input before forecast results are finalized?

A.21. Yes. Aside from gathering data and consulting on the use of the gathered data from stakeholders, preliminary results of the forecast are shared with stakeholders, including but not limited to AE, ICT and SHA for input and feedback to ensure forecast accuracy. Feedback is then incorporated into the model as required to finalize the model results.

Q.22. What factors contribute to the discrepancies between the 2024 forecast update results and those from the 2023 update?

A.22. The variances in forecast results between the 2024 and 2023 updates can be attributed to four primary factors:

1. In-Migration Data Integration: The approach to in-migration data integration in the 2024 model update involved the use of the 5-year compound annual growth rate method instead of the 5-year historical average used in previous updates. This change helped smoothen the effect of volatility of periodic values – a limitation of the arithmetic mean.
2. Improved Training Data: Improved availability and understanding of training data, most of which was obtained directly from the post-secondary institutions, led to conservative estimates of the anticipated number of graduates in future years, thereby causing variances in the supply estimates.
3. Training Seat Expansions: Supply for some occupations is projected to increase due to recent training seat expansions which will increase the number of graduates entering into the Saskatchewan labour market.
4. Government Commitments: Public commitments and capital projects announced in the 2024-25 fiscal year have resulted in an increased demand for the health workforce as they are required to support the new initiatives.

Together, these factors explain the observed shifts in forecast outcomes from the 2023 to the 2024 update. Changes to the forecast are anticipated as the Ministry's branches and its stakeholders continually receive new information and the forecasting model is refined.

Q.23 Is the forecast methodology reviewed for improvement?

A.23. As part of the preparation towards the future update, a rigorous analysis of the forecast methods is conducted after each year's update to identify areas of improvement on how the methods are executed and data specified in model. In some case, new datasets for inclusion to the model is also identified and pursued. If such changes and data additions are made in future updates, they will contribute to variances in forecast results across comparable years to previous updates.

However, this process is important as it keeps the methods and data usage compatible with Saskatchewan's healthcare environment and needs. It is also important to note that the accuracy of the projections increases with higher-quality data and better data coverage.

Q.24. What are the options that were explored to address the inherent skew towards smaller occupations? How have other jurisdictions addressed this issue?

A.24. A relatively straight forward option that was tinkered with included redistributing the weights (assigning new weights) or simply dropping some of variables that accounted for skewness towards smaller occupations. Since decisions were made collaboratively and closely with partners on weights distribution and variable inclusion during last year's update, none of these options are currently presented in this package.

There have been discussions around prioritizing occupations in classes of workforce size or training (i.e., domestic, IPA or no training) – a sample of which is included on page 68 of this package. If enough interest exists, the Ministry can look into it in preparation of next year's update to comprehensively address some of these issues.

To the Ministry's knowledge, no other jurisdictions conduct the level of analysis that we do in Saskatchewan as it relates to using a set of variables to prioritize occupations.