# Health Status of BC Health System

Senate Engage April 22, 2024



Emergency room in Prince Rupert, B.C. closes for 8th time this month

#### 'Shocking' increase in number of B.C. youth who self-harm: Health survey

B.C. woman's death blamed on health care gaps and lack of family doctor

'Always noise': B.C. senior spends 9 days in hospital hallway due to overcrowding

B.C. teen misses out on years of treatment after late diagnosis

'Hidden in their bags': B.C. nurse speaks out about drug use in hospital

# Hospitals seeing more patients with increasingly complex medical issues: UBC

The failure, the students say, is attributed to overcrowding, understaffing and violence in B.C. emergency departments.

'Not acceptable': UBC medical students voice emergency room concerns

#### Increased demand

- population
- ageing population
- incidence and prevalence of disease
- acuity, co-morbidities, chronic diseases

Public health emergency 1: Opioid overdose (2016) Public health emergency 2: Covid (2021)



# BC Health Status<sup>1</sup>

- Top 5 causes of death
- 1. Malignant cancers
- 2. Heart disease
- 3. Alzheimer's and dementia
- 4. Illicit drug use
- 5. Stroke



### BC Cancer Statistics<sup>2</sup>

- 24% of deaths from malignant cancer
- 30,200 new cases in 2021
  - Breast
  - Lung
  - Prostate

50% of new diagnosis

- Colorectal
- Increasing incidence
  - 43% increase each year projected
  - 2035: 44,800 new cases
  - 90% due to population growth and ageing



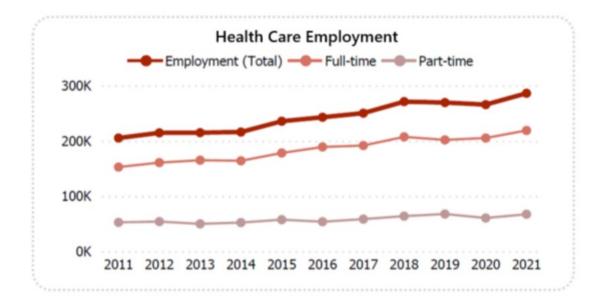
### Responding to demand

Challenges:

- Facilities at or beyond capacity
- Programs at or beyond capacity
- Facilities and programs not accessible
- 'limited' funding for capital and operations
- Shortage of health care workers
  - Leaving the profession
  - not choosing the profession



### **BC Health Care Workforce**

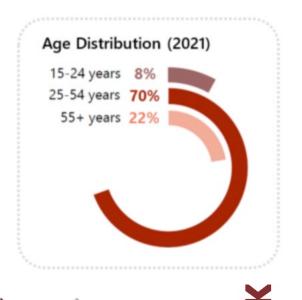


- 286,300 people were in BC health care sector (2021).
- Increase of 80,000 since 2011
- 11.2% of employment in all industries in BC.

Source: Statistics Canada Labour Force Survey, ESDC custom table

# BC Population and the Workforce

- 5.2 million (est) in 2021
  - 19% aged 65 or older
- 6.5 million (est) in 2041
  - 25% aged 65 or older
- Health sector workforce is aging
  - 22% aged 55 or older
  - 8% aged 15-24
- Increased attrition
- Decreased attraction to health professions



### **BC Government Response**

- Capital and infrastructure
- Policy and planning
- Human Resources



### Fraser Health: Over \$6.5 billion in capital







### Surrey Hospital and Cancer Centre – Early 2030

168 beds

5 ORs

4 Procedure Rooms

55 ER spaces

50 Oncology exam rooms

54 Chemo spaces

6 Lin Accs Child Day Care



Pharmacy Advanced **Diagnostics:** Medical Lab 3 CTs 2 MRIs 2 PET CT **1 SPECT CT** 1 cyclotron **Digital Health** Virtual Health





### Surrey Hospital and Cancer Centre

- First of its kind in BC
- Integrating digital and virtual care technologies to enable and support care inside and outside the hospital
- Focus on planetary health first fully electric hospital in BC
- Innovative, real-time digital technologies and tools embedded in patient care journey from pre-admission to discharge
- More care from home



### Vancouver Coastal Health







**Paul Myers Tower** 



# Policy & Planning

- Health Professions and Occupations Act
  - Addressing "In Plain Sight"
- Regulatory reforms
- Scope of practice review Regulation revisions
  - Paramedics
  - Pharmacists
- Internationally educated health professionals
- Staffing ratios
- Compensation models
- Health authorities and PSIs to work together



#### B.C.'S HEALTH HUMAN RESOURCES STRATEGY

**Putting People First** 





**PROVINCIAL ALLIED HEALTH STRATEGIC PLAN** A roadmap for strengthening allied health services in B.C.



#### A Pathway to Hope:

A roadmap for making mental health and addictions care better for people in British Columbia







#### Human Resources

4 cornerstones with 70 action

- Retain foster health, safe, and inspired workforces
- Redesign optimize and innovate
- Recruit attract and onboard
- Train create accessible career pathways

Indigenous Health and Reconciliation

- Cultural safety and humility foundational requirements
- Targeted strategies to support and protect Indigenous people as both patients and providers



### Human Resources - Retain

Considerations:

- 1 in 4 considering quitting in the next 2 years
  - 50% new nursing graduates change their place of employment or leave nursing within 2 years
- Increased burnout and anxiety
- Increased workload
- Highest risk of workplace injury
- High prevalence of workplace violence
- Shift work, 24/7 childcare inaccessibility
- Access to housing
- Other options for careers

### Human Resources - Retain

#### Actions:

- Expanding support for occupational and psychological health and safety
- Violence Prevention Training and Protection Services Officers
- Targeted retention incentives priority professions and high needs communities and services
- Flexible childcare spaces for new and existing healthcare workers
- Peer support mentoring retired professionals working with new grads



### Human Resources - Retain

#### Actions:

- Clinical management capacity building
  - Clinical managers
  - Manager supports
- Clinical practice leader and clinical educator capacity building



### Human Resources - Redesign

#### Considerations:

- Technology and artificial intelligence
  - Opportunity to dramatically shift care delivery and improve productivity
  - Work adaptation, changing roles
  - Micro-credentialing and upskilling
- Traditional models of care delivery inefficiencies, bottlenecks due to HR availability and other constraints



### Human Resources - Redesign

#### Actions:

- Workload standards targeted recruitment and training plans
- Specialized work design teams inpatient medical and critical care; primary care; home support; long term care; cancer care
- Primary care training program team based care
- Surgical and anesthesia nursing role Masters of Nursing in Anesthesia program
- Associate Physician
- Nursing and Allied Health role optimization

### Human Resources - Redesign

Actions:

- Virtual care and telehealth
- Provincial artificial intelligence and health workforce technology strategy



### Human Resources - Recruit

#### Consideration:

- Over 70 allied health professions in addition to medicine and nursing
- Many other health careers outside of health professions
- "Every job is a health care job"
- 2031: 19% of new health care workers from outside BC, inclosing 16% from outside Canada
- Flexible employment over life cycle of career: transitions from full-time to parttime and back







### Human Resources - Recruit

#### Actions:

- Support for IE Nurses and Allied Health
  - Grants and bursaries for Training and assessment grants
- Indigenous specific recruitment strategy
- Health and Care Careers Promotion Project high school students:
  - Health career sampler
  - Dual credit expansion
  - Work experience expansion
- New health care grad transition program
  - Clinical mentorship, peer support, early career training



### Human Resources – Train

Considerations:

- 23 PSI deliver over 100 health programs
- PSI and health sector must modernize
  - More flexible and responsive to learners' and employers' needs
  - Modular training, more online and virtual options, expanding 'earn and learn' programs
  - Recommendations 18 23 "In Plain Sight"
- Professional development and micro-credential
  - to expand skills
- Rural and remote generalist practice supported by targeted and innovative educational approaches

# Human Resources - Train

Actions:

- 'earn and learn" for in-demand professions
- Health authority led training
  - Entry-level training, professional upgrading, micro-credentialing...in partnership with PSIs as appropriate
- Priority program bursaries to attract students
- SFU Medical School
- BSN Specialty Nursing Learning Pathways
  - Integrating specialty nursing into BSN programs
- Nurse Practitioner Program expansion
- Health Information Science Program expansion UG and Graduate
- Health Education Program Expansions
- Student Practice Education Capacity building



# KPU Faculty of Health Response

Current activities:

- Program expansion BSN-Advance Entry, Bachelor of Psychiatric Nursing (BPN), GNIE
- "Earn and Learn" Health Care Assistant Program
- "Earn while you Learn" Licensed Practical Nursing into BSN
- Specialty Nursing Learning Pathways
- Expansion of FOH Professional Studies 168% increase; 1,143 seats in 2023/34
- Violence Prevention Training



# KPU Faculty of Health Response

- "Earn while you Learn" Licensed Practical Nursing into BSN
- KPU, Fraser Health, BC Nurses Union, Ministry of Health
- Pilot cohort of 24 LPNs from Royal Columbian Hospital
- KPU Flex to recognize their LPN education and experience
- 4 consecutive terms blended delivery
- Benefits to learner and employer
- Faculty of Arts and Faculty of Science

#### Strategic Opportunities to Consider – New Programming & Infrastructure

#### **Nursing Related**

- HCA to LPN
- LPN to BSN
- Mental Health Worker
- Mental Health Worker to BPN
- Diploma to BPN
- Opioid Management & Harm Reduction

#### Simulation Centre of Excellence

- FOH Programs
- FHA
- SFU Medical School

#### **Allied Health**

- Medical Laboratory Professionals
- Respiratory Therapy
- Health Management – HR, Finance, Data Analytics, QI
- New role for "Unit Clerks"
- Pharmacy Technician

#### **Integrative Health**

- Bachelor of TCM
- Indigenous Healing & Medicine
- South Asian Medicine

#### Partnerships

- SFU Medical School
- FHA new programming
- IPE student & patient experience





# Fraser Health HR Response

As per your request, here are the top 10 priority professions that Fraser Health and the province have identified.

- 1. Registered Nurses & Registered Psychiatric Nurses
- 2. Licensed Practical Nurses
- 3. Nurse Practitioners
- 4. Health Care Assistants & Community Health Workers
- 5. Social Workers
- 6. Physiotherapists
- 7. Occupational Therapists
- 8. Respiratory Therapists
- 9. Medical Lab Technologists
- 10. Medical Diagnostics & Cardiac Sonographers

#### **BC Cancer**

400 – 600 oncology nurses over the next 10 years

In Fraser Health, in no particular order, our top five (with raw numbers needed from 2023-2029) are:

- **1.** RN's: LPN to BSN bridging program (650+) prefer an 'earn and learn' approach
- Nurse Practitioners (50+) prefer acceptance of nurses with and without a Masters' degree already
- 3. LPN's: HCA to LPN bridging program (150+) prefer an 'earn and learn' approach
- 4. Respiratory Therapists (150+)
- 5. Clinical Informaticists (50+)

#### Discussion with MPSFS

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# **Guiding Principles**

- In demand, new funding potential
- "laddering" on both ends
- KPU Flex, where appropriate
- Flexible delivery models learners working, learners not local
- Compressed delivery
- Integration of simulation into curriculum
- Articulation agreements
- Shorter time for program development purchasing curriculum from other PSI
- Ability to deliver quality education

### **Trends in Healthcare**

- Digitally enabled healthcare
  - Centralized data and EMR
- Telehealth
- Artificial intelligence diagnostic and clinical decisions
- Genomics and Personalized medicine
  - Predictive and prognostic analytics
- Wearable devices continuous monitoring
- Primary healthcare delivery
- Innovations in mental health approaches and delivery
- Public health and surveillance

# How KPU Can Respond

- Future students promote careers in health care
- Graduating students careers in health care
- Not all health careers have defined health programming
- What does this mean for your Faculty?
- Opportunities for collaborative programming