Innovation in Pacific Northwest Healthcare
Fourth Industrial Revolution

Physical

Digital

Biological

Convergence
Innovations in health

Examples include:

- Next-gen sequencing
- 3D printing
- Immunotherapy
- Artificial Intelligence
- Virtual Reality
- Biosensors & trackers
- Point-of-care diagnostics
- Convenience care (retail clinics and urgent care)
- Tele-health
- Social media (to improve patient experience)

SOURCE: Deloitte Center for Health Solutions
Leadership Themes

Healthcare innovation in the Pacific Northwest

- Focus on the patient
- Listen to young employees
- Apply technology e.g. genomics, digital identity, blockchain etc
- Standardize on clinical indications
- Understand the social determinants of health
- Ensure transparency in the healthcare system
Health Research in BC

Examples include:

BC AHSN
ACADEMIC HEALTH SCIENCE NETWORK

Strategy for Patient-Oriented Research
Putting Patients First

Genome British Columbia
Leading > Investing > Connecting

MICHAEL SMITH FOUNDATION FOR HEALTH RESEARCH

Plus, significant investments in health research in BC by charities, the federal government and industry.
Canada’s Digital Supercluster

Data Visualization
AR-MR-VR | Mapping | Simulation & Modelling

Data Analysis
Cloud | Supercomputing | Quantum Computing | Machine Learning

Data Collection
Internet of Things | Connectivity | Data Repositories

Natural Resources
Precision Health
Industrial

LEARN MORE:
DigitalSupercluster.ca
Precision Medicine

- Treatment influenced by a person’s molecular profile
- Therapy matched to disorder
- Potential to:
  - Improve outcomes
  - Shift focus to preventative care
  - Manage costs

Sources: Deloitte UK Life Sciences Health Care Predictions; Global Market Insights, 2016
Supercluster: Phase 1

Secure Health & Genomics Platforms

Build core infrastructure for a secure health and genomic platform enabling cancer treatments through Personalized Onco-Genomics

Possible Collaborators:
Tailored Health Therapies

Build a platform to implement cognitive analytics and machine learning technologies to create tailored health therapies for patients

Possible Collaborators:

- CHANGE HEALTHCARE
- CRIM
- DNASTACK
- Genome British Columbia
- GenXys
- Jewish General Hospital Foundation
- Contextual Genomics
- Deloitte
- D-Wave
- Genome Sciences
- Fraser Health
- LifeLabs
- Microsoft
- PHEMI
- Providence Health Care
- SickKids
- Terramera
- UVic
- First Nations Health Authority
- First Nations
- SFU
- TELUS
- UBC
- UHN
- Life Sciences British Columbia
- The Princess Margaret Cancer Foundation
- British Columbia
Patient-centric Care

Provide Canadians with their health data and insights to assist patients and caregivers in managing health and wellness.

Possible Collaborators:

- Augurex
- careteam
- clarius
- curatio
- D-Wave
- First Nations Technology Council
- ayogo
- CHANGE HEALTHCARE
- CRIM
- Deloitte
- First Nations Health Authority Health Innovations
- Genome British Columbia
- Fraser Health
- GenXvs
- LifeLabs
- MetaOptima
- new hippo HEALTH
- Providence Health Care
- TELUS
- TwoTall Totems
- LifeSciences British Columbia
- Microsoft
- PHEMI
- SFU
- Terramera
- UBC
- UVIC
Conclusions

- Technology is bringing profound changes
- Innovation in healthcare is increasingly important
- Significant strengths exist in the Pacific Northwest
- Initiatives such as BC’s Digital Supercluster and the Cascadia Innovation Corridor are encouraging regional collaboration