Fraser Health: Health Information Strategies for Today and Tomorrow

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Better health.
Best in health care.

Agenda

- Welcome to Fraser Health
- Empower Patients
- Accelerate Primary and Community Care Innovation
- Transform Clinical and Acute Care Systems
- Advance Innovation and Analytics
- Strengthen our Digital Health Foundation

Fraser Health

From Burnaby to Hope

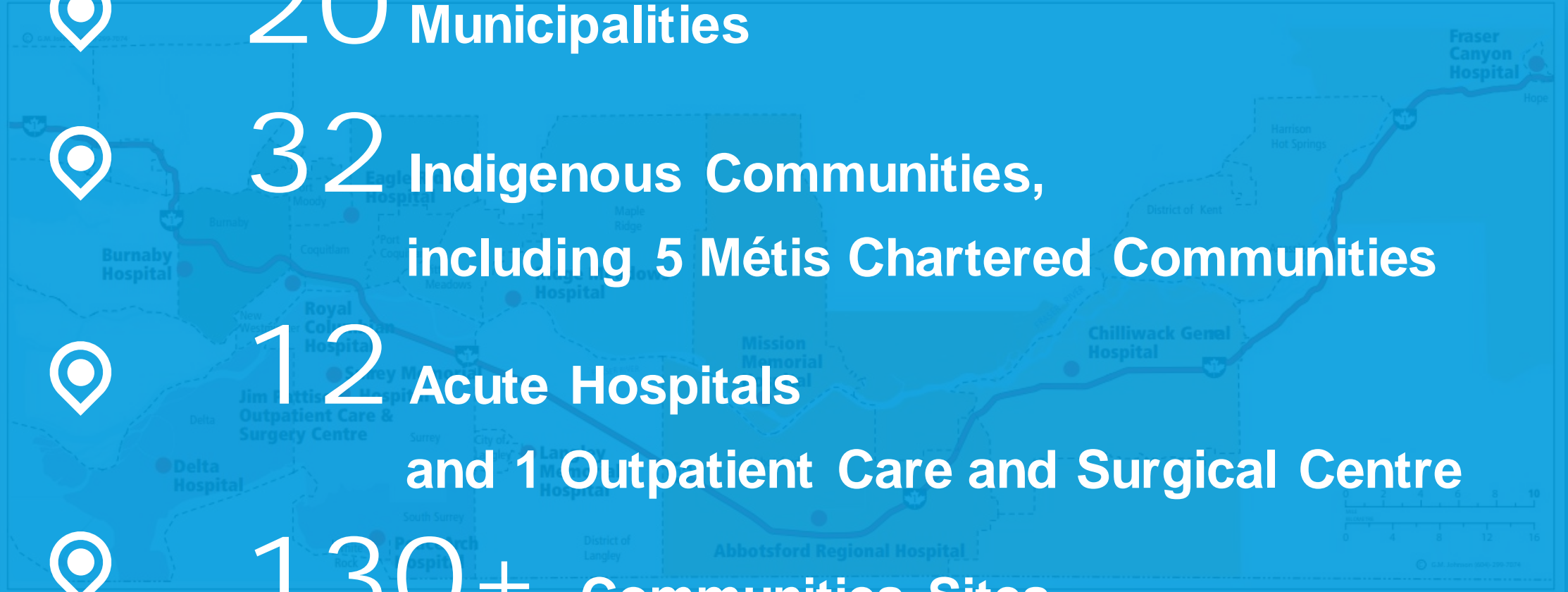**20** Municipalities

32 Indigenous Communities,
including 5 Métis Chartered Communities

12 Acute Hospitals
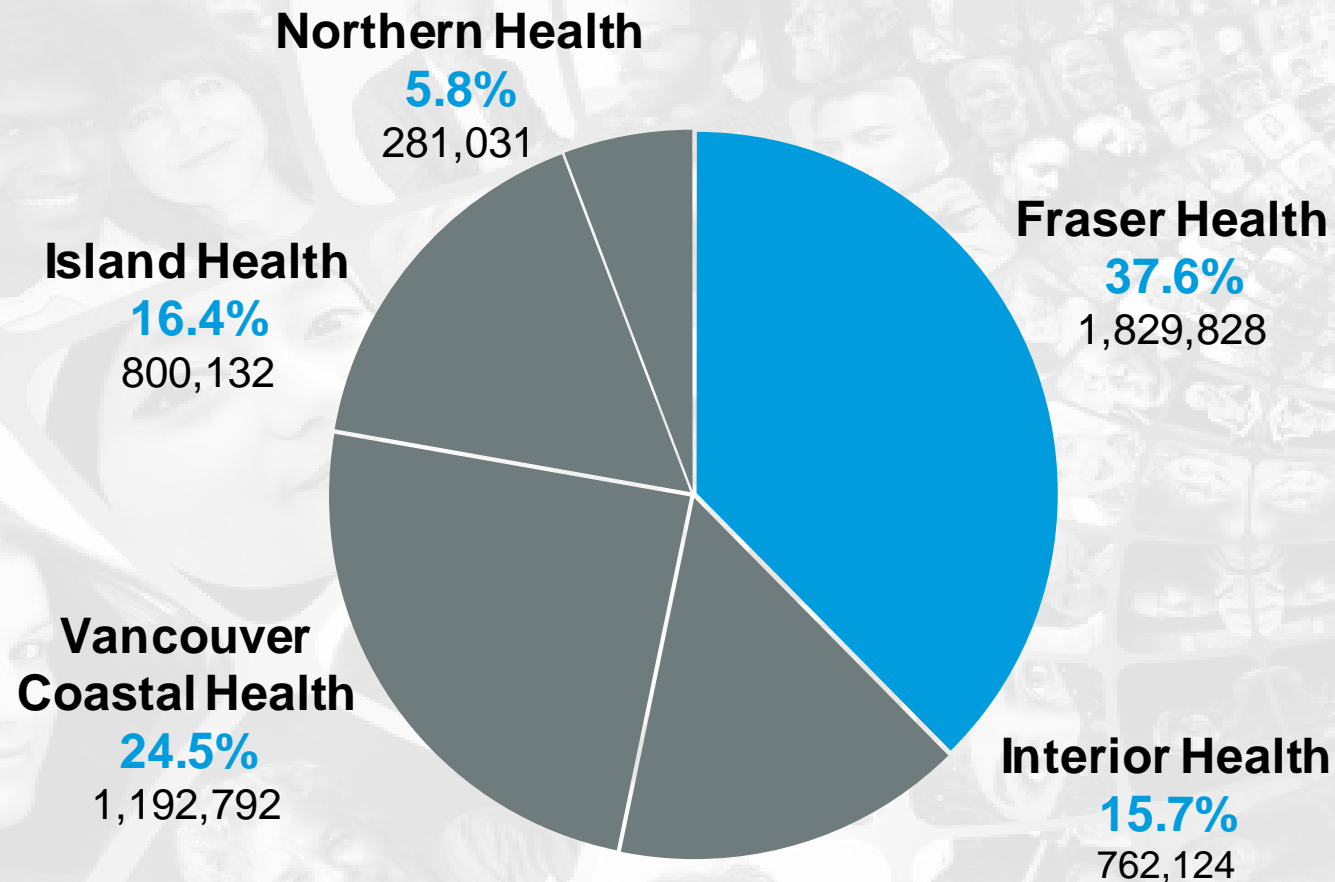and 1 Outpatient Care and Surgical Centre

130+ Communities Sites

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1,829,828

Number of British Columbians served by Fraser Health

BC Population:
By Health Authority, 2018

Northern Health
5.8%
281,031

Fraser Health
37.6%
1,829,828

Island Health
16.4%
800,132

Vancouver Coastal Health
24.5%
1,192,792

Interior Health
15.7%
762,124

BC Population:
Projected Growth, 2018-2028
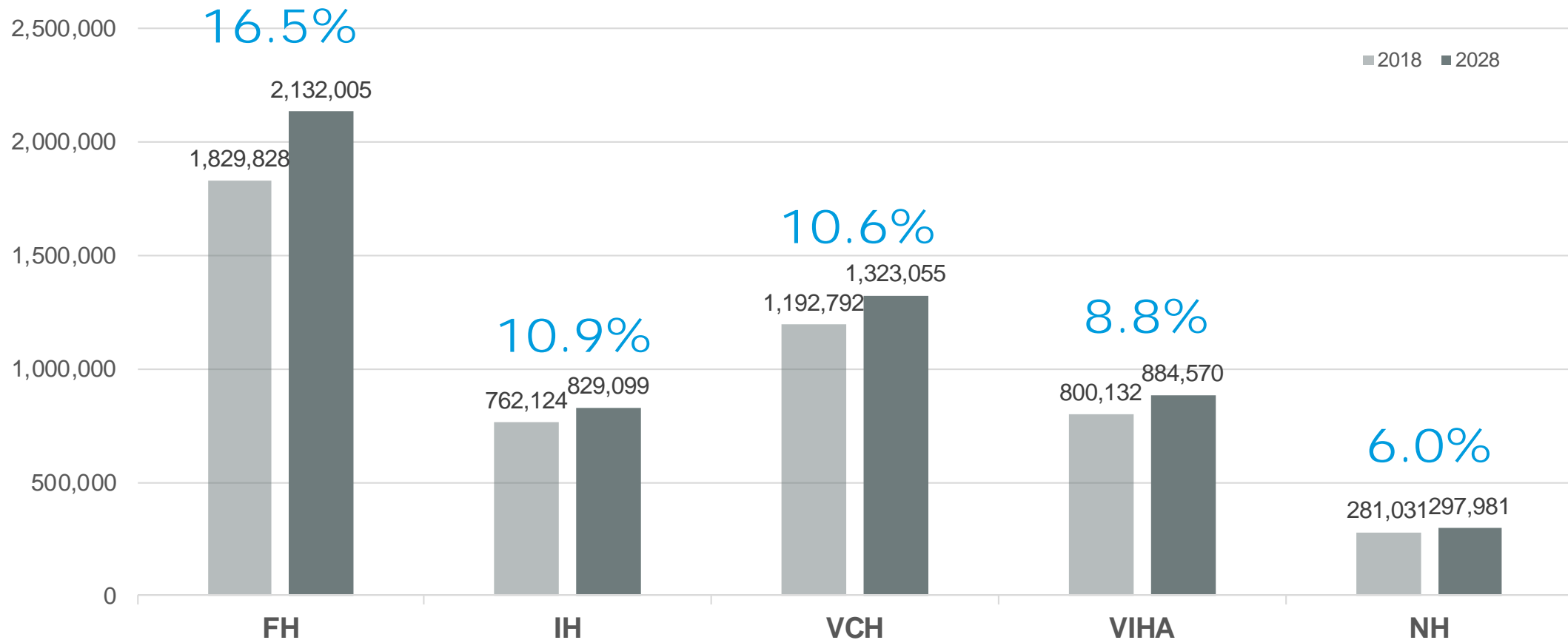
26,000+ Professional Staff

2,900+ Physicians

4,500+ Registered Volunteers

1000's Vendors & Contractors

Every Day

1,930+ ER Visits

8,500+ Home Support Hours
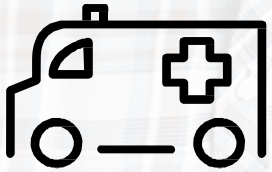
400+ CT Scans

~50 Babies Born

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Our Story

Our Mission
What is Our Purpose

To improve the health of the population and the quality of life of the people we serve.

Our Vision
What We Want to Achieve

Better health.
Best in health care.

Our Values
What Guides Our Behaviour

Respect, caring, and trust characterize our relationships.

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Health Informatics Capabilities

Workforce Enablement

Empower a transformed and collaborative workforce through the provision of innovative information management services and technology

Success through Partnerships

Fostering and enhancing progressive partnerships with vendors, service providers, business consumers, and the broader community

Data as Strategic Asset

Data is treated as a strategic asset that has value to Fraser Health

Technology Enabled Performance Management

Transparent, accountable, and informed decision making at the person, population, and organization level
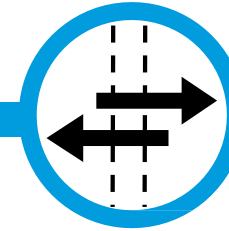
Informed Decision at the Point of Service

Convergence of information, methodology, and technology supporting evidence-informed decisions at the point of service
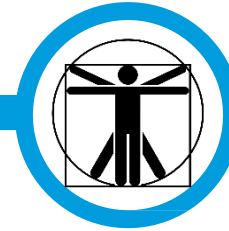
Patient Centric Information

Single view of a person across the continuum of care
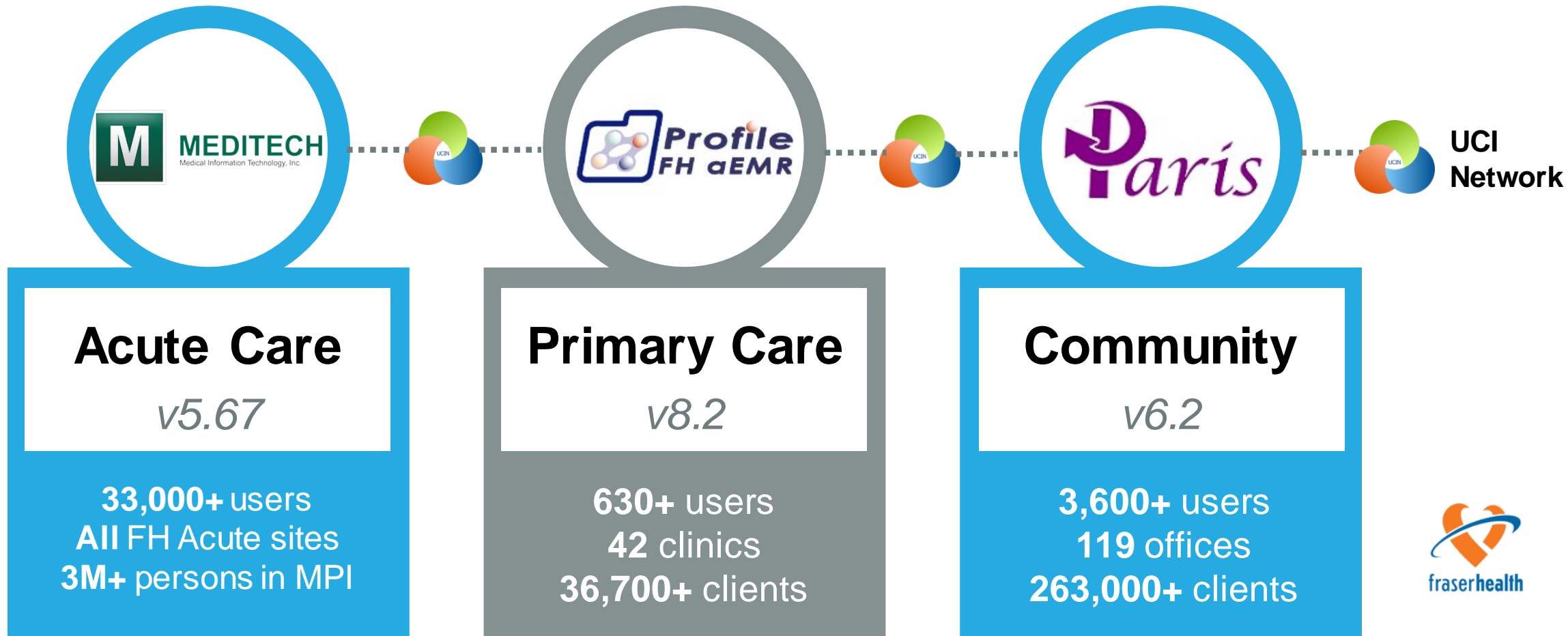
Information without Boundaries

Seamless flow of information across organizational boundaries within the province of British Columbia

Health Care Anywhere

Access to health care information services wherever and whenever it is needed

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Our Core Health Information Systems

MEDITECH
Medical Information Technology, Inc.

Profile FH aEMR

Paris

UCI Network

Acute Care
v5.67

33,000+ users
All FH Acute sites
3M+ persons in MPI

Primary Care
v8.2

630+ users
42 clinics
36,700+ clients

Community
v6.2

3,600+ users
119 offices
263,000+ clients

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Health Information Integration & Exchange
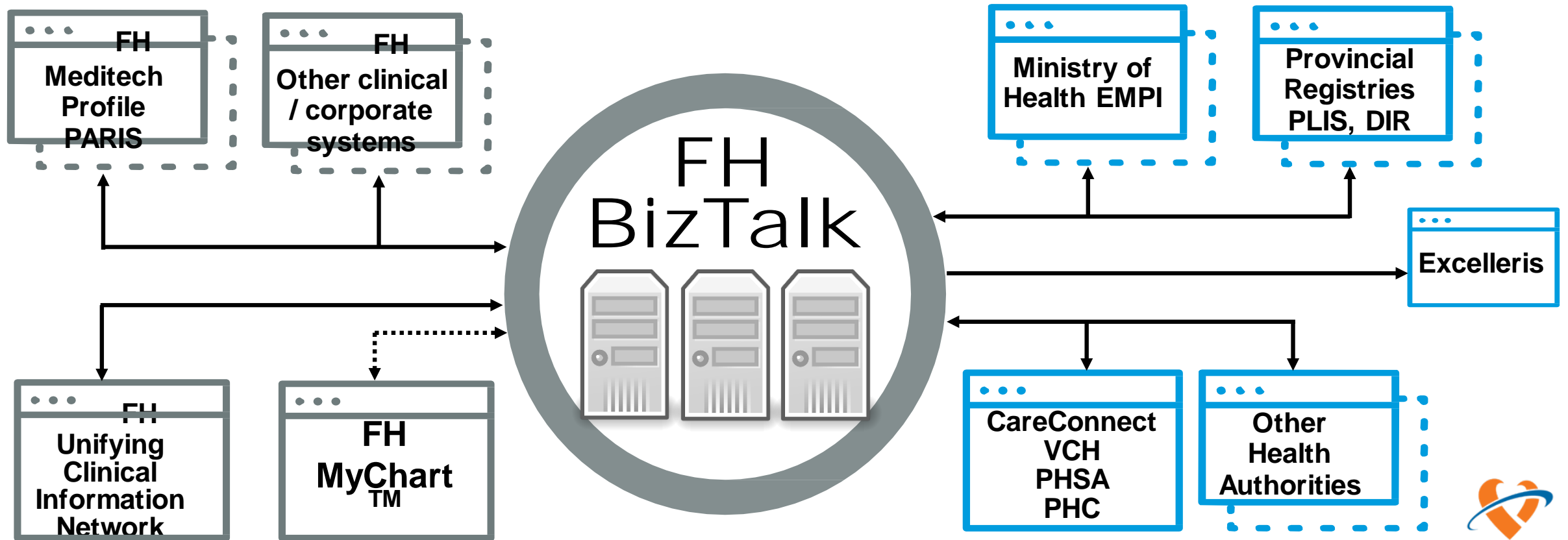
Empower Patients

Patient Experience

Dedicated department at Fraser Health

Vision:

- *"Leading transformation of practice for remarkable patient and provider experiences."*

Outcomes:

- Patients and families involved in healthcare from bedside to boardroom
- Patient will experience high quality care that is centred on them
- Patient and family centred care is integrated throughout the organization
- Providers are engaged and deliver excellent care in a healthy environment
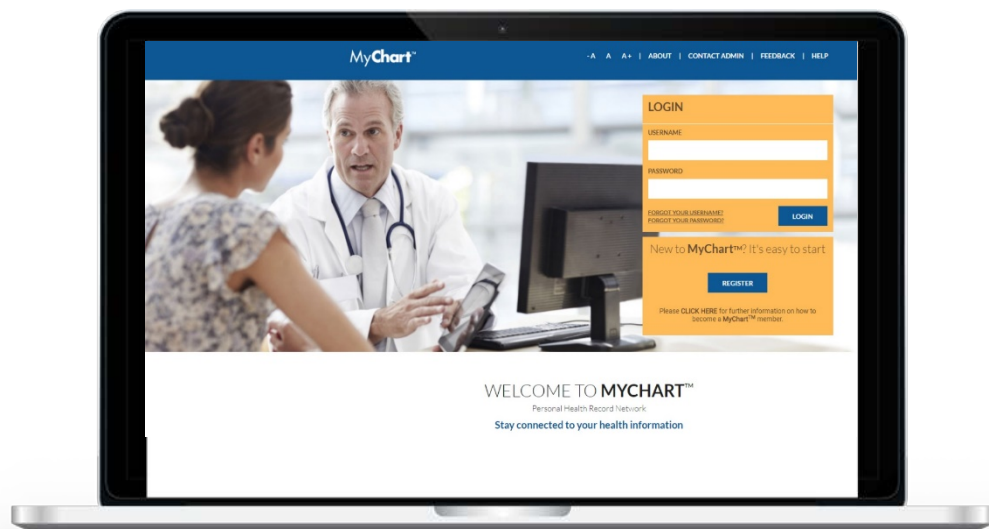
Partnering with Patients

Goals:
- Providing access for patients to their health record
- Ability to self enter personal health information
- Easy access to trusted patient education materials online

Approach:
- Patient Advisory Committee partnership
- Strategic approach developed
- Proof of concept with high interest populations
- Quantitative and qualitative evaluation processes

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MyChart™ Personal Health Record

Key features to Enable, Connect, and Inform patients, families, and health care providers from anywhere, anytime

Clinical Information

Record Sharing

Messaging

Health Tracking

Upload Additional Information

24/7 Access Anywhere

A complete online personal health management and continuity of care record solution

MyChart™ Patient Portal Impact

MyChart™ reduces adverse drug events in outpatient settings.

MyChart™ helps with collaborative symptom tracking between health care providers.

MyChart™ supports transition and continuity of care.

89%
"MyChart™ helps me self-manage my own or my family member's health condition."

84%
"I am more likely to have a test performed… to have access to results online."

93%
"I would grant temporary access to hospital ER physician to provide information about my health"

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Changing Paradigm

- Request for Information
  - Redaction processes currently done manually

- Pediatric population
  - Mature minors

- Changing documentation practices
  - Practices that are inherent in the culture of professions

- Disruption = Innovation

Accelerate Primary and Community Care Innovation

Primary and Community Care Redesign

- Strong partnerships established between Divisions of Family Practice and Fraser Health

- Long standing working group established to foster a strong working relationship between FH IM/IT and the various Divisions of Family Practice operating in the FH region:

  - Identify and prioritize opportunities for improvement where wider collaboration between the Divisions of Family Practice and FH is necessary to support service delivery
  - Collaboratively identify solutions aligned with each organization principles and actively pursue
  - Wider collaboration and communication to support service delivery
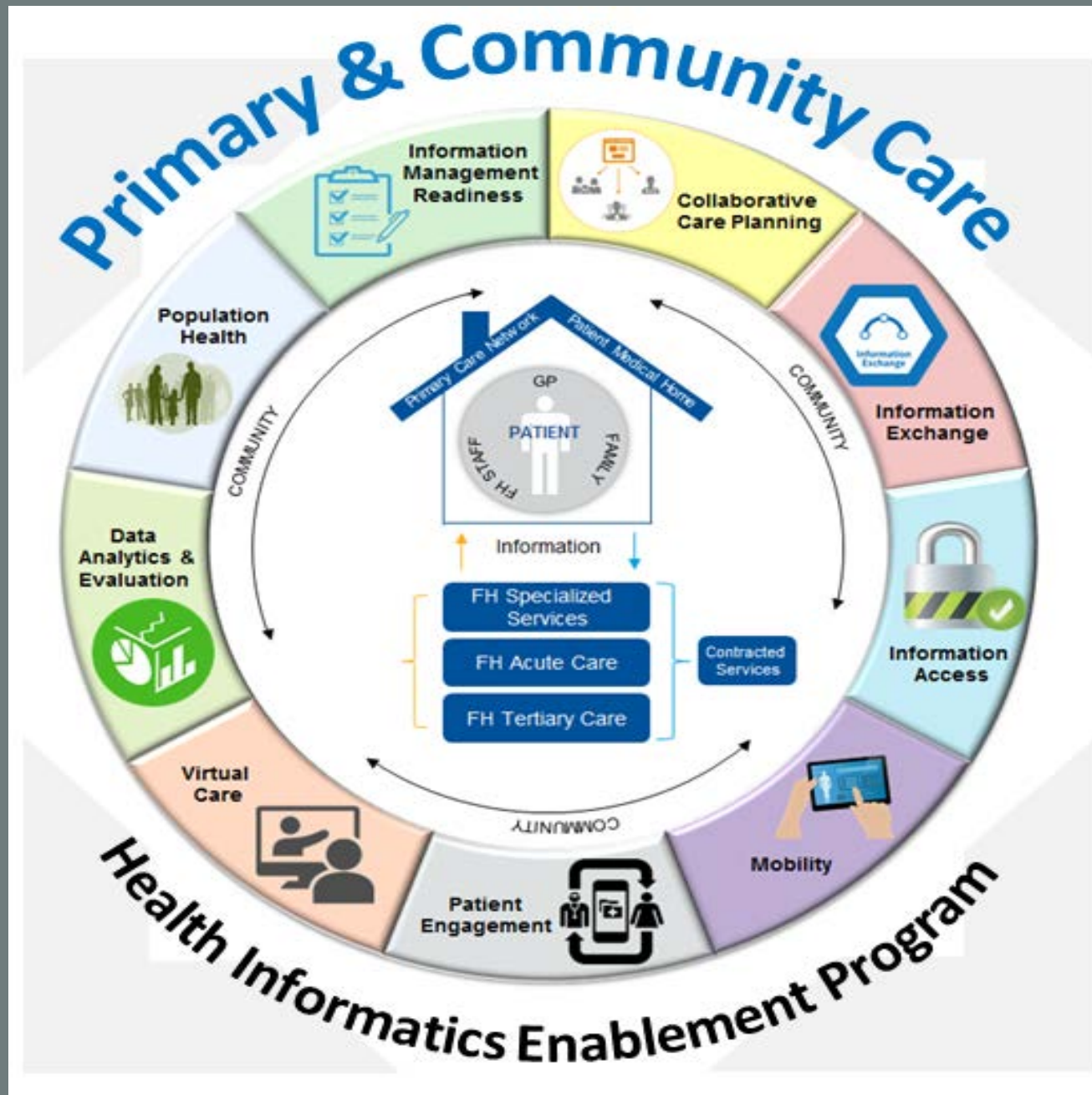
Provides an **integrative framework** with **coordinated oversight** to many of our current projects

Aimed at **enabling** clinical areas

To advance the Ministry of Health's strategic transformation agenda for **patient-centered** integrated primary & community care
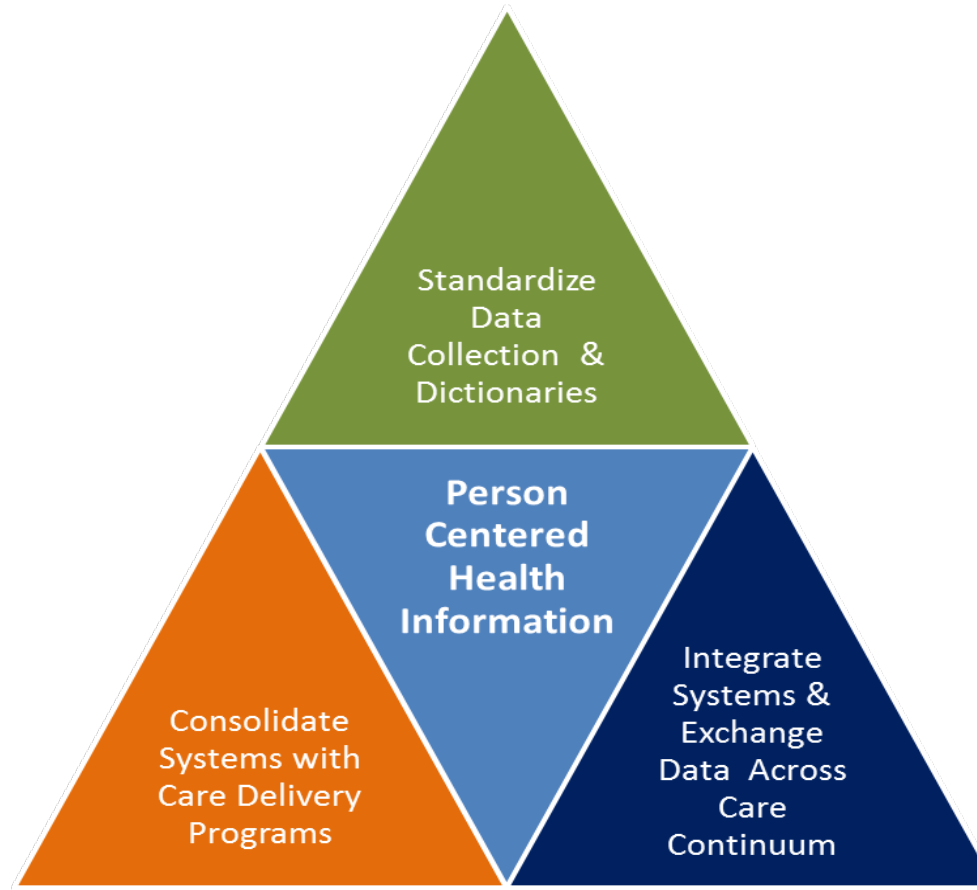
Transform Clinical and Acute Care Systems

- Long standing goal to create person centered health information

Standardize Data Collection & Dictionaries

Person Centered Health Information

Consolidate Systems with Care Delivery Programs

Integrate Systems & Exchange Data Across Care Continuum

Acute Care – Functions and Applications 2003

Functionality / Site	Fraser North HSDA				Fraser East HSDA				Fraser South HSDA			
	BH	RCH	ERH	RMH	CGH	MSA	FCH	MH	LMH	DH	PAH	SMH
eMPI	MEDITECH Magic				MEDITECH C/S				MEDITECH Magic		Eclipsys	
Electronic Medical Record	MEDITECH Magic								MEDITECH			
Registraton	MEDITECH Magic				MEDITECH C/S				MEDITECH Magic		Eclipsys	
Electronic Legal Record (SCA)												
Patient / Clinic Scheduling	MSM								MEDITECH			
Emergency Dept. Mngt												
Peri-natal Mngt												
OR Management	MSM				MEDITECH C/S				MSM		HBOCC	MSM
Anaesthesia Management												
Physician Workload Mngt												
Physician Documentation												
CPOE / POM												
Nursing Documentation												
Allied Health eDocumentation	MEDITECH Magic				MEDITECH C/S				MEDITECH			
Patient Order Entry	MEDITECH Magic								MEDITECH Magic			
Pharmacy	MEDITECH Magic				MEDITECH C/S							
Closed Loop Medication Mngt												
Medical Imaging	MEDITECH Magic				MEDITECH C/S				MEDITECH		MEDITECH	MRM
PACs / Specialty Modalities	GE				Agfa TeleRadiology						Agfa mp	
Laboratory	MEDITECH Magic				MEDITECH C/S				MEDITECH Magic		Eclipsys	SOFT
Food & Nutrition Mngt	MSM				MSM					Sasquatch		Eclipsys
Transcription Services	MEDITECH Magic				MEDITECH C/S				MEDITECH	MSM	Dictaphone	Dictaphone
Dictation	Dictaphone				Lanier	Dictaphone	Lanier		Dictaphone			
Dictation Radoliogy	Tapes	Tapes	Dictaphone		Lanier			Tapes	Dictaphone build & voice			

Acute Care – Functions and Applications 2014

Functionality / Site	Fraser North HSDA				Fraser East HSDA				Fraser South HSDA				
	BH	RCH	ERH	RMH	CGH	ARH	FCH	MH	LMH	DH	PAH	SMH	JP
eMPI	MEDITECH C/S 5.65												
Electronic Medical Record	MEDITECH C/S 5.65												
Registration	MEDITECH C/S 5.65												
Electronic Legal Record (SCA)	2014				MT 5.66			2014					
Patient / Clinic Scheduling	MEDITECH C/S 5.65												
Emergency Dept. Mngt	MEDITECH C/S 5.65												
Peri-natal Surveillance & Mngt		GE surv.				GE surv.						GE	GE surv.
OR Management	MEDITECH C/S 5.65												
Anaesthesia Management						GE						GE	GE
Physician Workload Mngt	MEDITECH C/S 5.65												
Physician Documentation	MEDITECH C/S 5.65												
CPOE / POM													
Nursing Care & Documentation	MEDITECH C/S 5.65												
Allied Health eDocumentation	MEDITECH C/S 5.65												
Patient Order Entry	MEDITECH C/S 5.65												
Pharmacy	MEDITECH C/S 5.65												
Closed Loop Medication Mngt													
Medical Imaging	MEDITECH C/S 5.65												
PACs / Specialty Modalities	GE												
Laboratory	MEDITECH C/S 5.65												
Food & Nutrition Mngt	CBORD												
Transcription Services	mModal Outsource to MEDITECH C/S 5.65												
Dictation	mModal												
Dictation Radiology	Lanier (speech recognition)												

Clinical and Acute Care Transformation

- **Clinician** and **Professional Practice led** program that supports clinical transformation through the:

  - Creation of one accessible, individualized, and integrated plan of care across the care continuum for all professions involved in supporting patients/clients/residents

  - Upgrade of the core acute healthcare information system to the newest version, MEDITECH Expanse, with Advanced Clinical Systems to optimize quality and safety

Integrated Plan of Care

Objectives:
- Creation of a unique person-centered and point of care electronic healthcare information system
- Improving data capture, data quality, and consistency of documentation
- Embedding decision-making support into clinical tools
- Reducing redundant documentation

Enables:
- Transition from paper to electronic charting in Meditech Patient Care System (PCS) module
- Standardized documentations for multiple professions all in one place

ARH
Apr 2016
•
RCH Mental Health
June 2018

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Facility Spotlight:
Royal Columbian Hospital, est 1862

1 of only 2 Level 1 Adult Trauma Hospitals in BC

- ✓ **Cardiac Care**
- ✓ **Neurosurgery**
- ✓ **High-risk Obstetrics**
- ✓ **Neonatal Intensive Care**
- ✓ **Acute Mental Health**

15,000+ Trauma Cases

940+ Open Heart Surgery

260+ Air Ambulance Flights

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Advance Innovation through Analytics

Becoming an Insight Driven Organization

- Dedicated Integrated Analytics Team supporting operational and performance reporting within Fraser Health
- In 2017, Fraser Health Executive and members of the Leadership Team established a vision for integrated data and analytics with the objective for Fraser Health to become an Insight Driven Organization
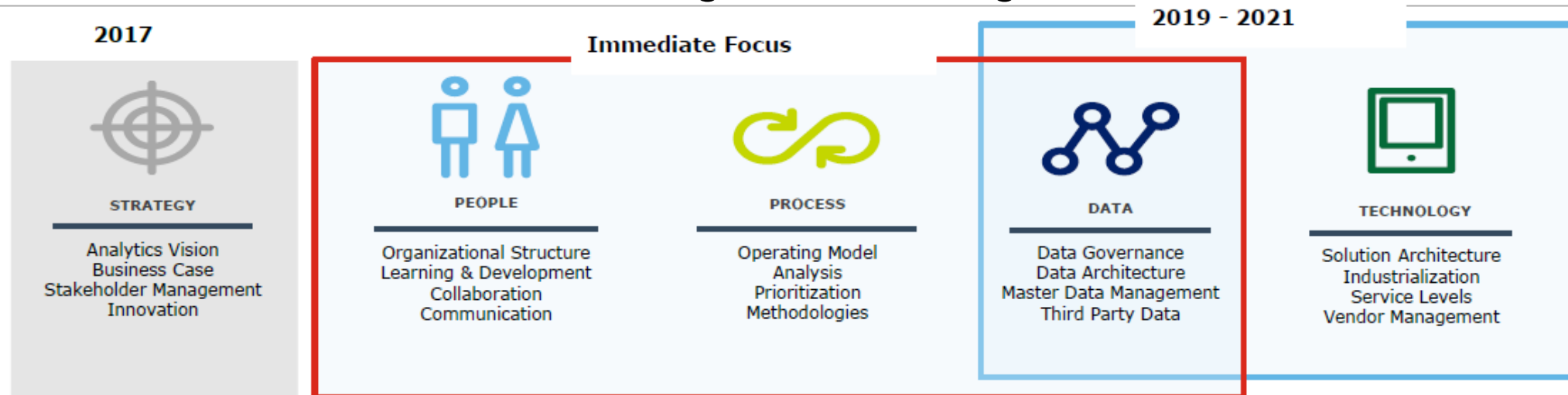
Guiding Principles

1. Information is managed as a key health sector asset
2. Analytics supports strategic and operational needs of Fraser Health
3. Information and analytics is governed using clear roles and responsibilities minimizing the spread of accountability
4. Information and analytics is made accessible to support internal and external sharing and use
5. Single source of truth for data and analytical insights

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Integrated Data and Analytics Objectives

Re-align core clinical and business data assets and data analytics resources across FHA that will operate under a new **Target Operating Model**

Establish robust **Enterprise Data Strategy** with foundational data collection, management, access, and use capabilities that will enable consistent and coordinated use of data analytics infrastructure and delivery capabilities

Adopt a coordinated approach to **analytics service delivery** with common standards, robust analytics practices, and a transparent coordination of priorities across business and clinical areas

Establish new **Governance Structure** overseeing data collection, management, access, and use to ensure that the data and analytics investments deliver maximum value for FHA and the community.

Develop and prioritize value-based **use cases** that support FHA strategic and operational objectives

Refresh and enhance **technology infrastructure** to provide enablement of data warehouse and Meditech data repository applications with additional self service enhancements

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Strengthen our Digital Health Foundation

Wi-Fi Enablement across Fraser Health

Guests

Complete

All acute sites + corporate office by 2018

Acute

In Progress

Campus-wide

Voice-grade

All FH acute sites by 2021

Non-Acute

Planning

2018: Proof of Concept at 3 sites

2019-2020: 65 community sites

FH
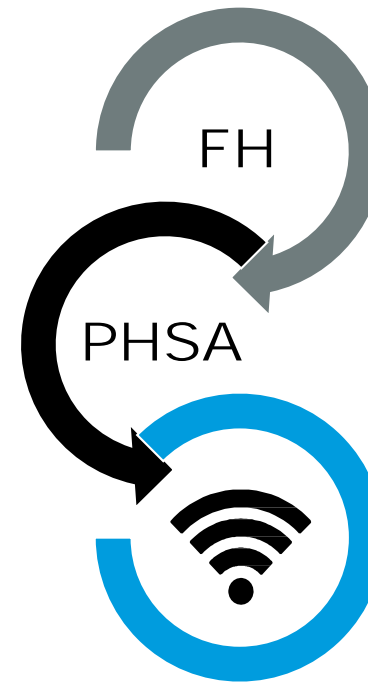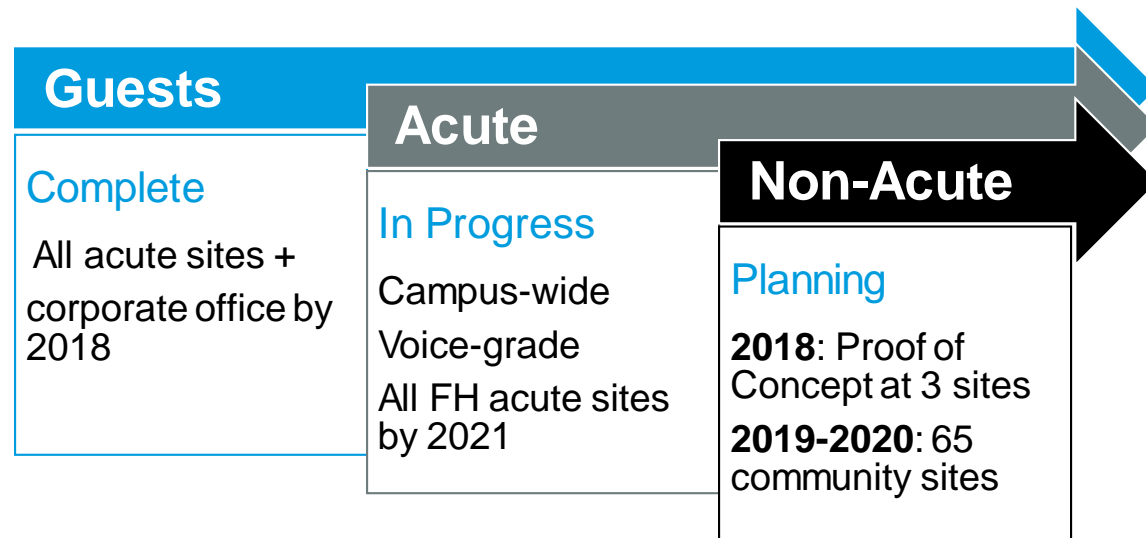
PHSA

FH Team

- Define and manage project
- Liaise and consult with business areas
- Engage facilities management

PHSA Tech Services

- Manage network core, edge switches, routers
- Design, survey, deploy, and monitor Wi-Fi

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Enterprise Mobility Management
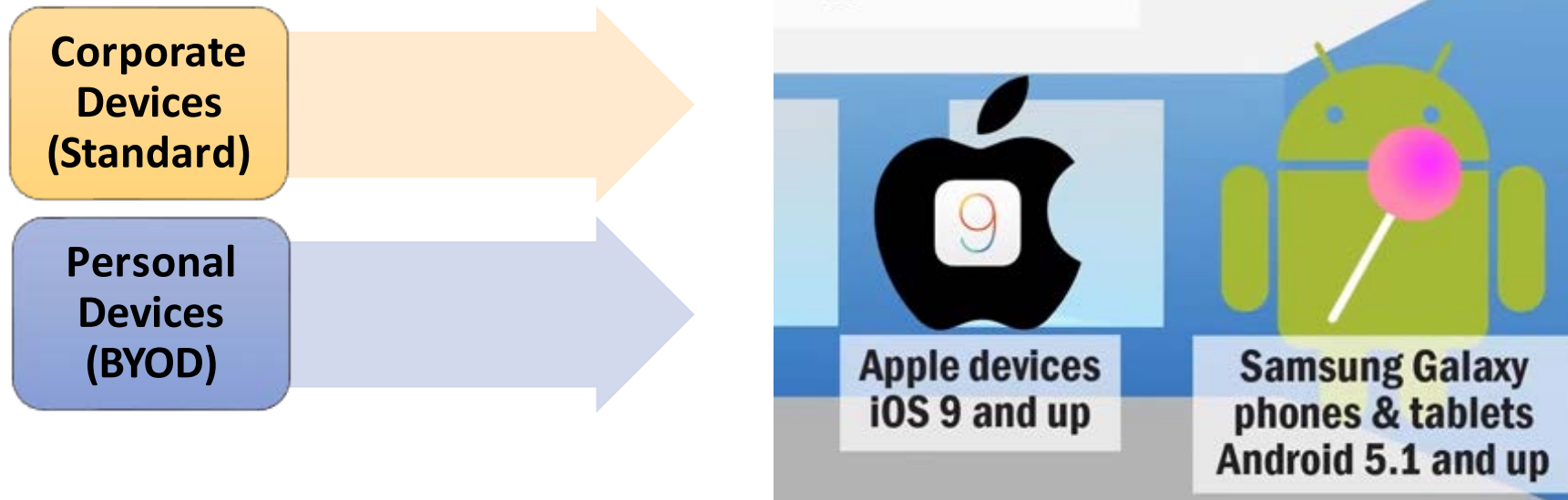
CONTINUING MISSION:

" To achieve successful foundations and platforms that enable widespread and high-value use of modern mobile devices in Fraser Health. "

FH Enterprise Mobility Management Ecosystem

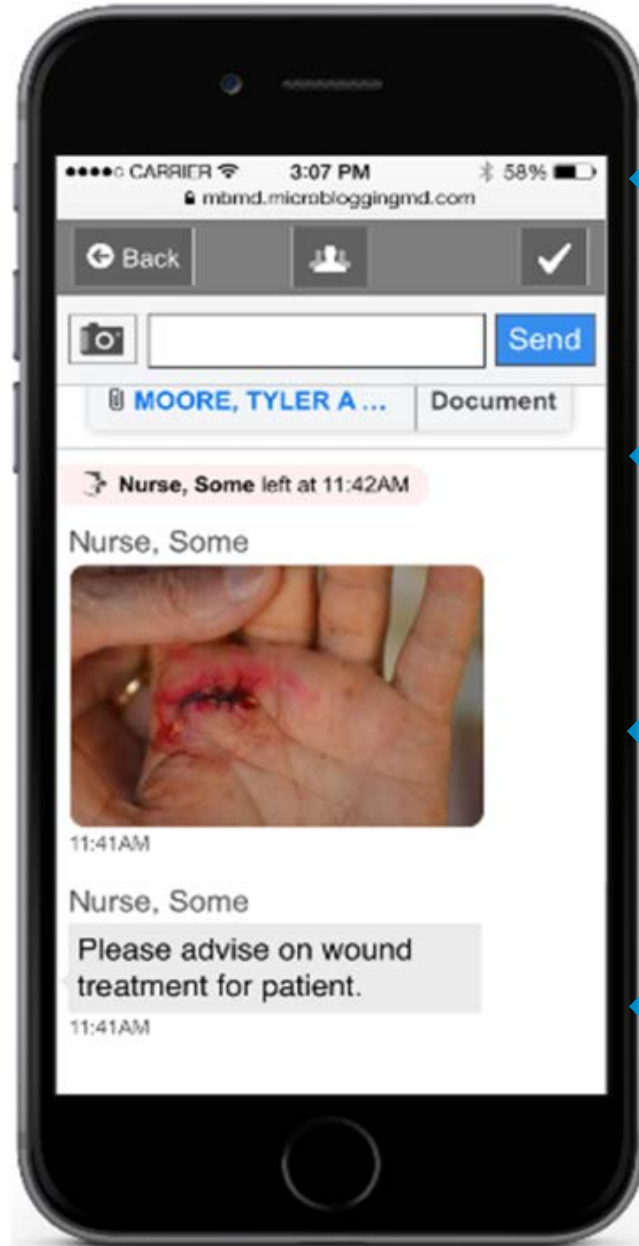| END USERS	APPLICATIONS	DEVICES	CONNECTIVITY	SECURITY	MIDDLEWARE	INFRASTRUCTURE
FH Staff	Clinical and Business Apps	Smartphones	Corporate Wi-Fi	2-Factor Authentication	Mobile Device Management	Mail Exchange
FH Physicians	Productivity Apps	Smart Tablets	Access from the Internet	Verified Secure Access	Mobile App Catalogue	Enterprise Systems
FH Contractors	Network and Collaboration	iOS android		AES 256-Bit Encryption		

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Choose Your Own Device

The establishment of an Enterprise Mobility Management platform allows Fraser Health users to have the option for a Choose Your Own Device program:

Corporate Devices (Standard)

Personal Devices (BYOD)

Supported devices

Apple devices iOS 9 and up

Samsung Galaxy phones & tablets Android 5.1 and up

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Secure Messaging Project

Through MicroBlogging MD

What It Is
Fraser Health's *only* approved secure text messaging service

Goals
Communicate confidential information *easily* and *securely*

Added Value
Enhance timely coordination of care, clinical workflows

Current Status
Roll-out in progress

Moving Forward

- Fraser Health is working toward a transformed healthcare delivery system – where patients and families are meaningfully engaged and empowered to manage their care
- Enable clinical areas for patient-centered integrated primary & community care
- Implementation of Advanced Clinical Systems to support the changing health care paradigm
- Continue driving Integrated Analytics strategy and roadmap
- Continue to support integration and interoperability to strengthen our foundation
- Continue to align with the Digital Health Strategy

Thank You

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