

Making Interoperability Work for Clinicians: Connecting Health Authority and Provincial Systems

Cindy Convey

Aneet Sahota

Fraser Health Authority



fraserhealth

Better health.
Best in health care.

Agenda

Who are we?

How did we start?

What is UCI?

Where are we now?

How are we doing?

What is next?

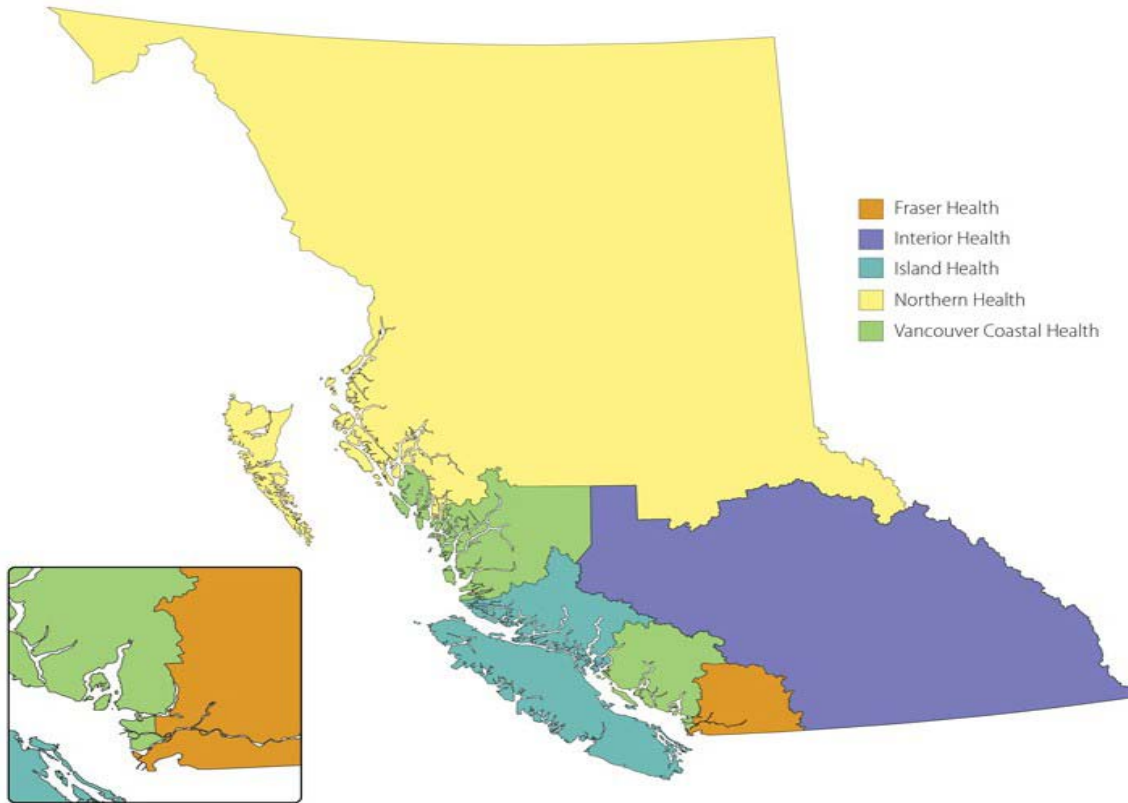
Who are we?



fraserhealth

Better health.
Best in health care.

About Fraser Health



16 cities including the largest in the province, covering 4000 sq. km

Serving 1.7 million people

150+ physical sites

Fraser Health Complexity

BC's largest and fastest growing health authority

15,000 clients supported by Home Health every day

Patients flow among large urban centres, small rural communities

More than 525,000 annual visits to Emergency

Several clinical information systems (Meditech, PARIS, Profile, Panorama, GE centricity)

27,000 Employees & Physicians

How did we start?



fraserhealth

Better health.
Best in health care.

Clinical Systems Integration Journey

Functionality / Area	Fraser North HSDA				Fraser East HSDA			Fraser South HSDA				
	Bby	New West	TriCities	M. Ridge	Chilliwack	Mission	Hope	Abbots	Langley	Delta	W. Rock	Surrey
Mental Health & SU Bedded	MEDITECH Magic											
MH & SU Bedded (eDocumentation)												
MH & SU Community (Reg/Ref)	MoH CPIM	MEDITECH Magic			MoH CPIM			MoH CPIM				
MH & SU Com (eDocumentation)												
Residential Care (owned/op'd)	MEDITECH Magic											
Residential InterRAI												
Home Health (Reg/Ref)	MoH CCIMS / MEDITECH Magic											
Home Health (eDocumentation)												
Home Care (Reg / Sched)	Procura				Procura			Procura				
Home Care - InterRAI											Momentum	
Primary Care (Reg/Sched/eDoc)											Clinicare	WOLF
End of Life (Reg/Sched/eDoc)	MEDITECH Magic (Reg/Sched)											
Environmental Health	Healthspace (APS)	Hedgehog Inspector			Healthspace (ASP)			Hedgehog Inspector				
CCFL	Healthspace (APS)	MoH CCFL			Healthspace (ASP)			MoH CCFL				
Public Health/Outbreak Mngt	IPHIS											

2003: Disparate Community and Acute systems

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				MEDITECH Magic Eclipsys			
Registration	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 Radiology	Tapes	Tapes	Dictaphone		Lanier		Tapes	Dictaphone build & voice				

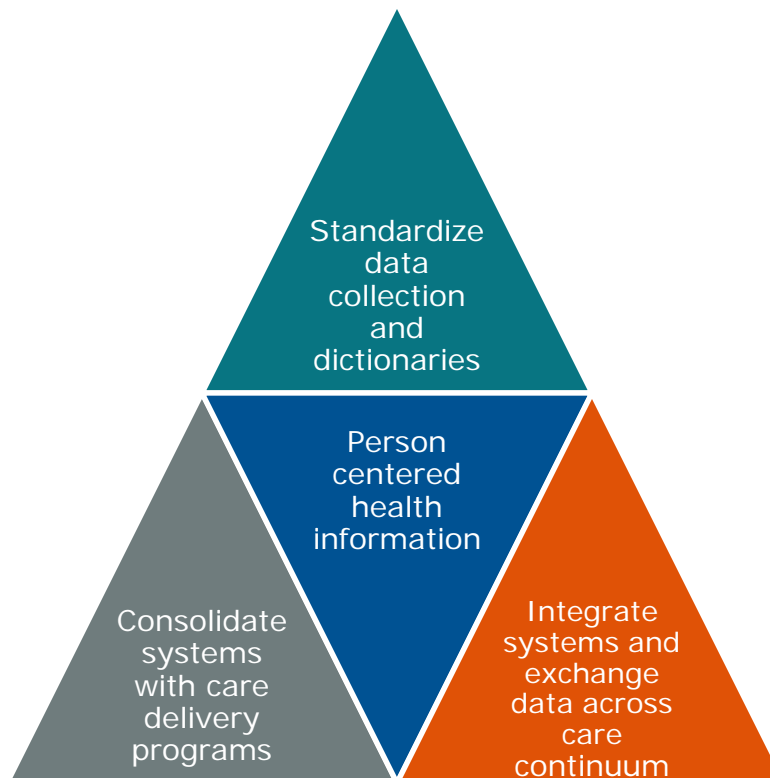
Clinical Systems Integration Journey

Functionality / Area	Fraser North HSDA				Fraser East HSDA				Fraser South HSDA			
	Bby	New West	TriCities	M. Ridge	Chilliwack	Mission	Hope	Abbots	Langley	Delta	W. Rock	Surrey
Mental Health & SU Bedded	MEDITECH C/S 5.65											
MH & SU Bedded (eDocumentation)	MEDITECH C/S 5.65											
MH & SU Community (Reg/Ref)	PARIS											
MH & SU Com (eDocumentation)	PARIS											
Residential Care (owned/op'd)	MEDITECH C/S 5.65											
Residential InterRAI	Goldcare											
Home Health (Reg/Ref)	PARIS											
Home Health (eDocumentation)	PARIS											
Home Support (Reg / Sched)	Procura											
Home Support - InterRAI	Goldcare											
Primary Care (Reg/Sched/eDoc)	IntraHealth Profile				Profile				Profile			
End of Life (Reg/Sched/eDoc)	PARIS											
Environmental Health	Healthspace (ASP)											
CCFL	Healthspace (ASP)											
Public Health/Outbreak Mngt	Panorama											

2014:
Consolidated
Community and
Acute systems

Functionality / Site	Fraser North HSDA				Fraser East HSDA				Fraser South HSDA			
	BH	RCH	ERH	RMH	CGH	ARH	FCH	MH	LMH	DH	PAH	SMH
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 5.65				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			
Physician Workload Mngt	MEDITECH C/S 5.65											
Physician Documentation	MEDITECH C/S 5.65											
CPOE / POM	MEDITECH C/S 5.65											
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	MEDITECH C/S 5.65											
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 Systems Integration Journey



Success
created a
challenge...and
an opportunity



Backgrou

Clinical Systems Integration Journey

- UCI Project delivering FH Health Information Exchange solution

- Solution that supports ***clinical decision making*** and is ***tightly integrated into clinical workflow***

- Allscripts/dbMotion selected as vendor partner



What is UCI?



fraserhealth

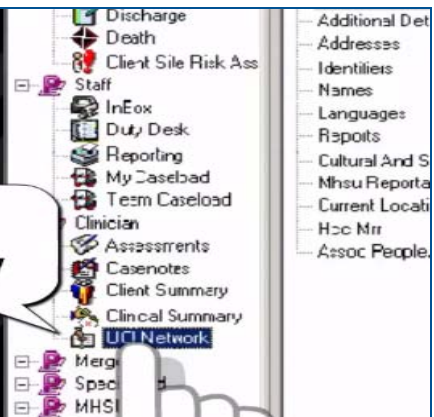
Better health.
Best in health care.

Unified Clinical Information

A Clinical view-only web application



Only one click away



Just click here



No password
No extra login

FH Administrator

Name: FHTURNER, UCI TEST PHN: 9878911756 Age: 55 Years Gender: Female

Summary ▼ Encounters Conditions ▼ Allergies Medications Laboratory ▼ Imaging Immunizations Procedures Clinical Documents

Summary Page

Allergies More data is available

Date ▼	Allergy To	Reaction	Severity ▲
24/Jun/2015		BP+	Severe
2/Feb/2015		Angioedema	*AL Severe
24/Jun/2015		DIZZI	Moderate
23/Mar/2015			Moderate

Medications There is no data available.

Date	Medication	SIG
No results found, possibly due to your search criteria		

Encounters More data is available

Admission Date ▼	Type	Facility	Attending
24/Jun/2015	ALLOCATED	Home Health	
3/Jun/2015	CLOSED REFERR...	Hospice Palliative ...	
15/May/2015	CLOSED REFERR...	FHA_Pans_Facility	
4/Feb/2015	ALLOCATED	System Managem...	

Problems There is no more data available

Date ▼	Category	Problem
24/Jun/2015 11:58:00		ADVANCE CARE PLAN
24/Jun/2015 11:55:00		NO CPR FORM (DNR)
24/Jun/2015 08:19:00		ALLERGY/ ADVERSE REACTI...
N/A	CCI	AVB-RMH-22/12/14 ARO-RM...

Labs More data may be available

Collected	Test	Specimen	Facility
No results found, possibly due to your search criteria			

Displays Patient Information From...



Provincial labs



Information Available

Progress Notes

Case Notes



Critical Care Indicators/Alerts

Allergies

Clinical Documents

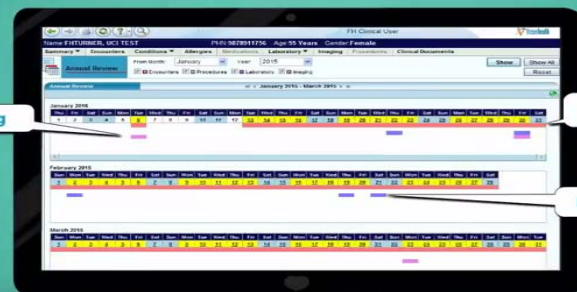


Annual Review

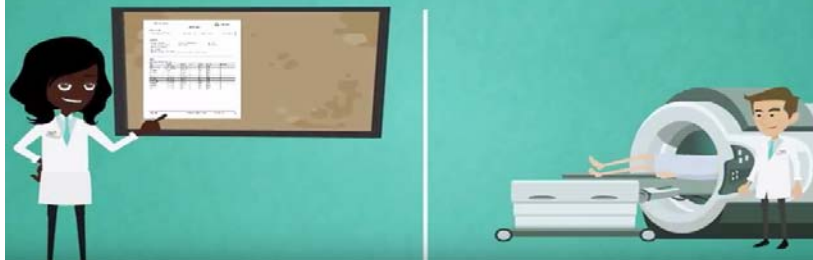
Imaging

Encounters

Lab Results



Medical Imaging Reports



Where are we now?



fraserhealth

Better health.
Best in health care.

Data From Three Sources

Meditech
(Acute)

Data from
Nov 2014

PARIS
(Community)

Data from
Sept 2015

Provincial labs
(private and
other health
authorities)

Data loads
as early as
2010

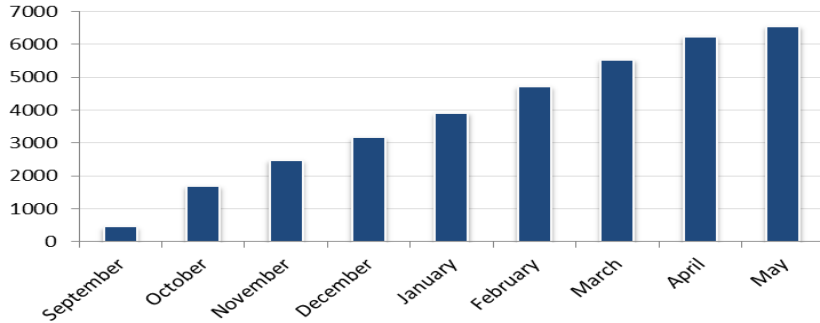
User Statistics



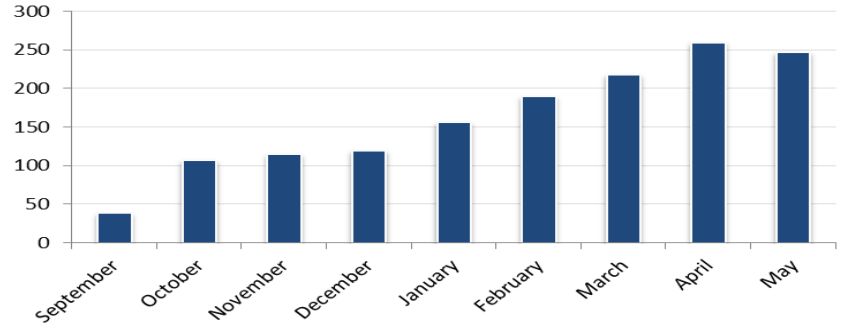
Numbers as of May 2016, total Meditech and PARIS users

Meditech User Trends

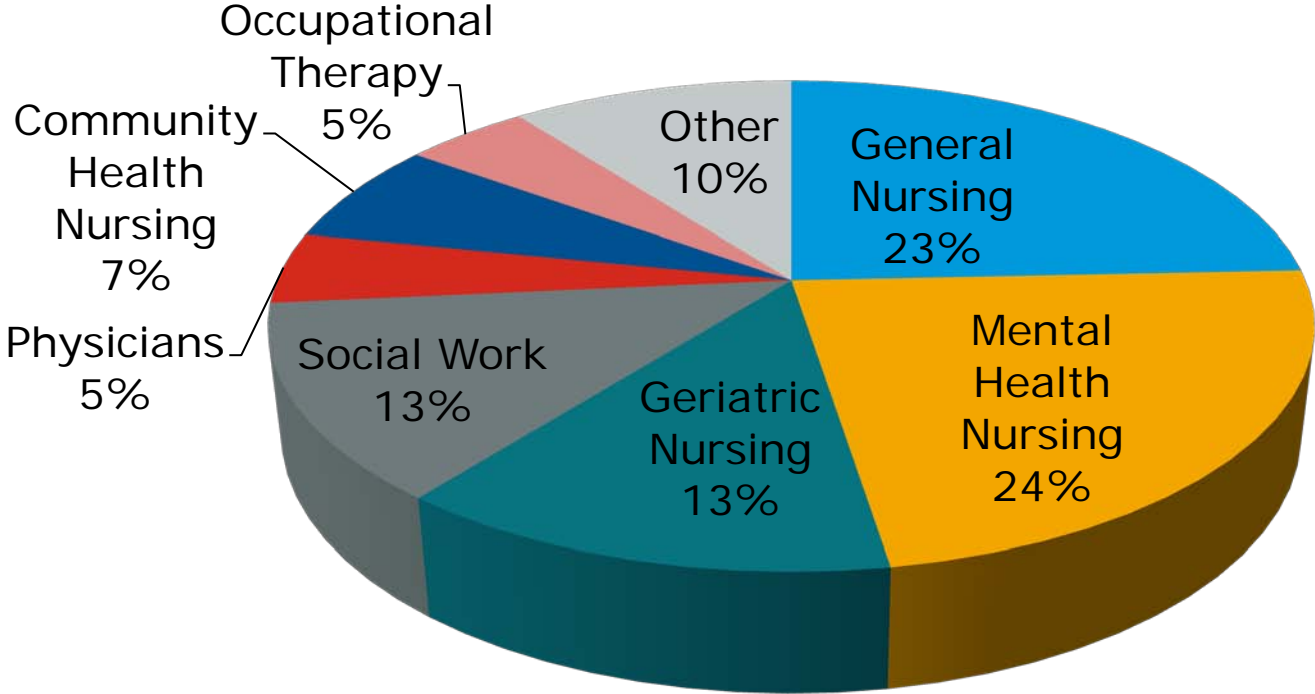
Number of Meditech users who have accessed UCI



Average number of people using UCI per week day

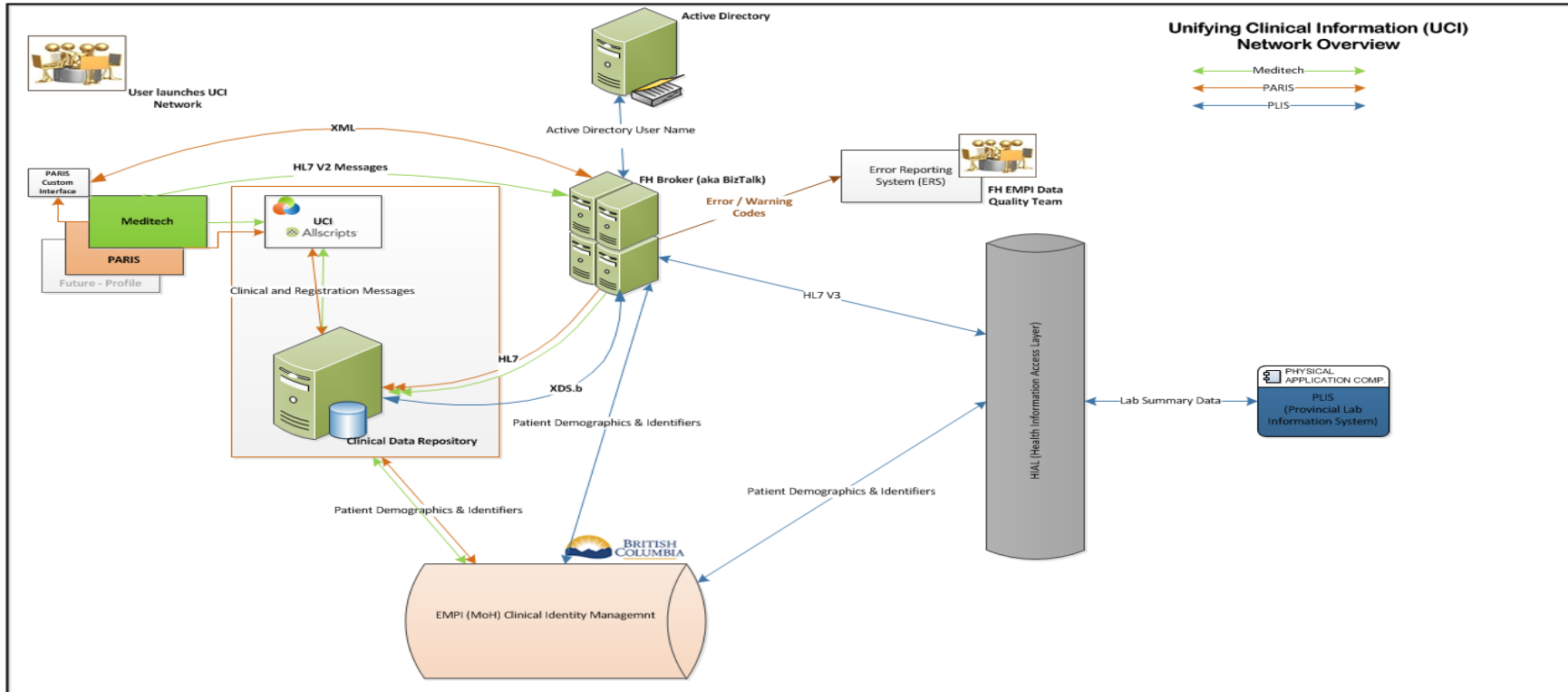


Clinical Areas Accessing UCI



Numbers as of April 2016, based on the top 43 users and their UCI usage

Connecting Health Authority and Provincial Systems

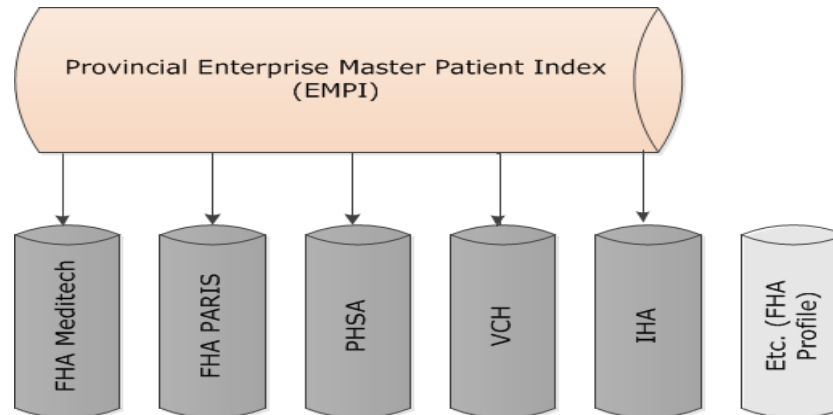


Patient Identity UCI Prerequisite

Shift to patient centric from regional or facility centric model

Linkage of person information across Fraser Health and BC

Integrate FH clinical systems with Provincial Enterprise Master Patient Index (EMPI)



Major Components

Provincial Data Sources (PLIS, Panorama, PDIV, Pharmanet etc.)

Health Information Access Layer (HIAL)

Clinical Data Repository

Message Broker

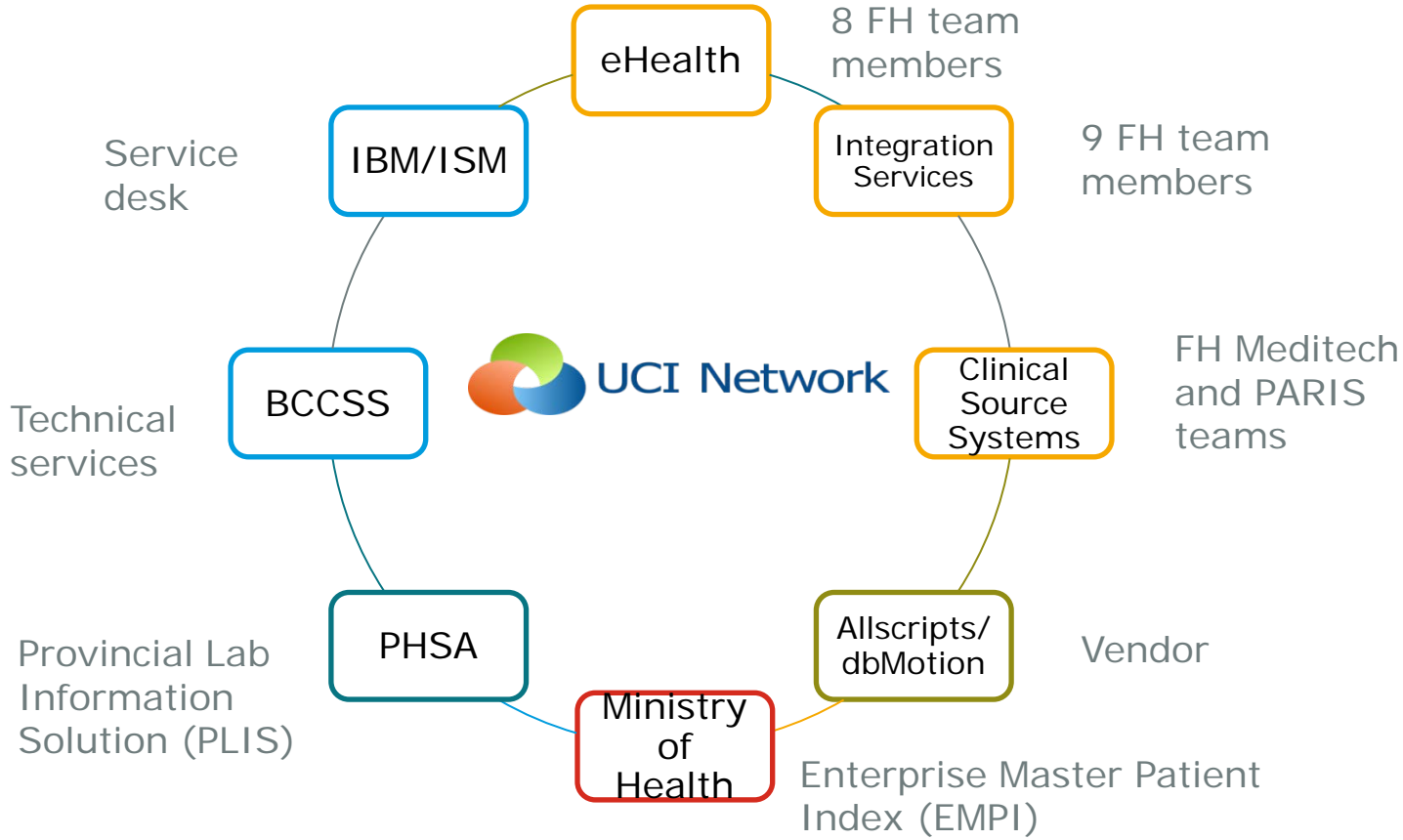
Meditech
(Acute)

Paris
(Community)

Profile
(Ambulatory)

Provincial Enterprise Master Patient Index (EMPI)

Operations and Maintenance



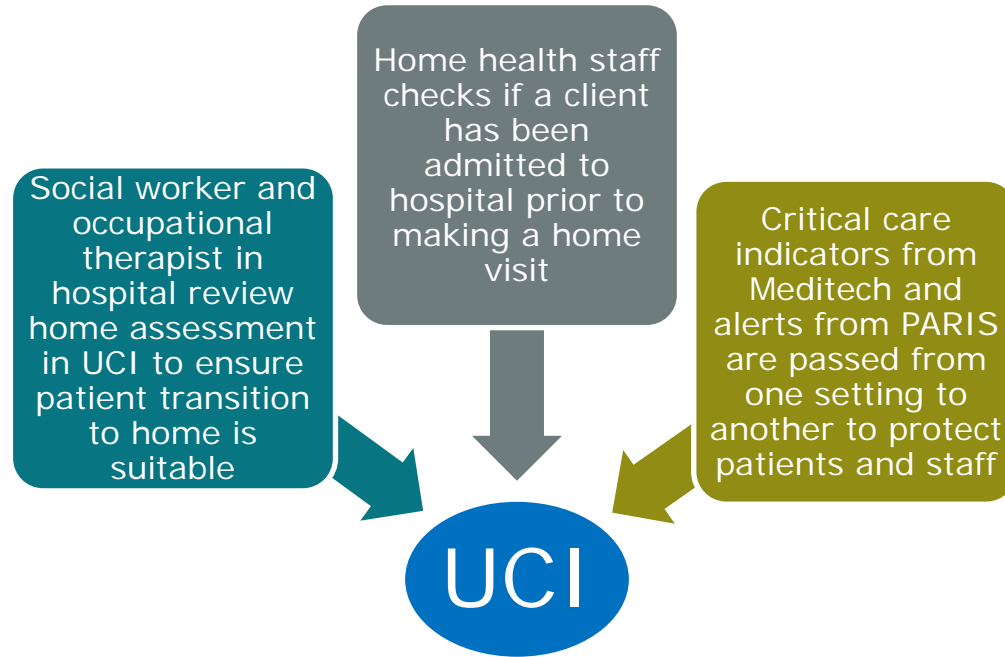
How are we doing?



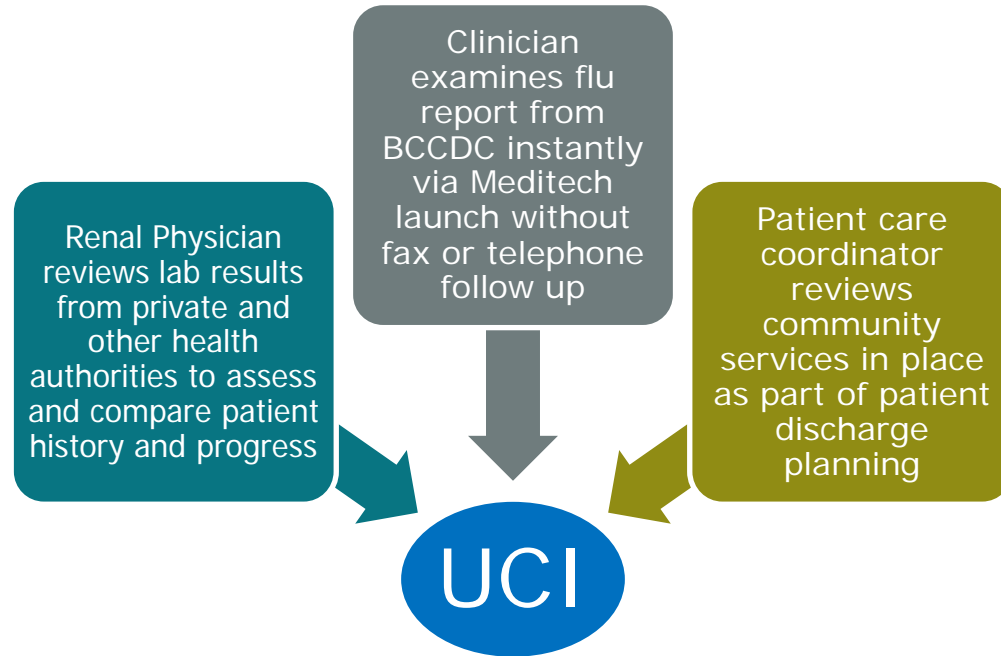
fraserhealth

Better health.
Best in health care.

Patient Centric Data Across Care Continuum



Ease and Speed of Access



Insights

Challenge

- Complexity of managing multiple stakeholders

Lesson Learned

- Importance of setting up an escalation forum with all vendors/stakeholders present
- Clinical working group essential to assist in key decision making

Insights

Challenge

- Competing initiatives (system upgrades, dependency on person identity project)

Lesson Learned

- Track and monitor dependencies as part of project status
- Change management processes to manage source system activities

Insights

Challenge

- Operational support and transition

Lesson Learned

- Ensure there is appropriate training, documentation and support resources in place
- Leverage vendor support tools and lean documentation
- Have dedicated support vs. project resources

What is next?



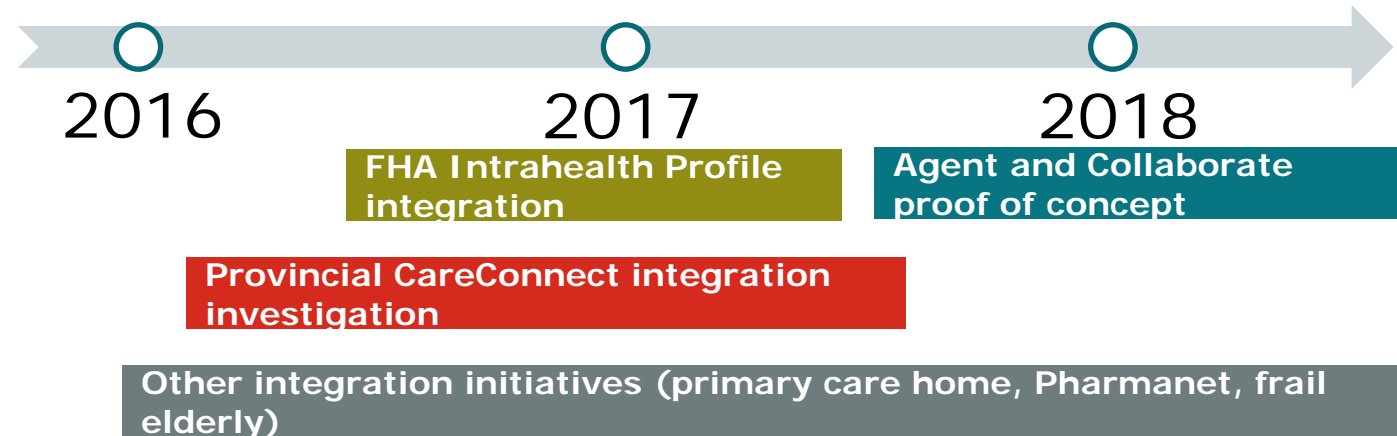
fraserhealth

Better health.
Best in health care.

Priorities

Optimization of current UCI platform

UCI v7 upgrade



Thank You!

Contact us

Cindy.convey@fraserhealth.ca

Aneet.sahota@fraserhealth.ca



fraserhealth

Better health.
Best in health care.