

Interoperability Strategies Since 2001

Sharing Our Journey

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Agenda

- About Fraser Health
- Foundational Systems and Approach
- Health Information Exchange
- Key Lessons Learned
- Questions



About Fraser Health...



What I Do Matters.



Geographically we serve, 20 municipalities



1.6 Million people
Served by Fraser Health...





Budget \$3.3 B



A high-angle, wide shot of a baseball stadium at night. The stadium is packed with a large crowd of spectators. The baseball field is visible in the center, with players on the field. The text "28,000 Staff" is overlaid in the center of the image.

28,000 Staff



6,500 Volunteers

2,500 Physicians



14 Acute Care Hospitals





130+ Community Sites



1 Corporate Office



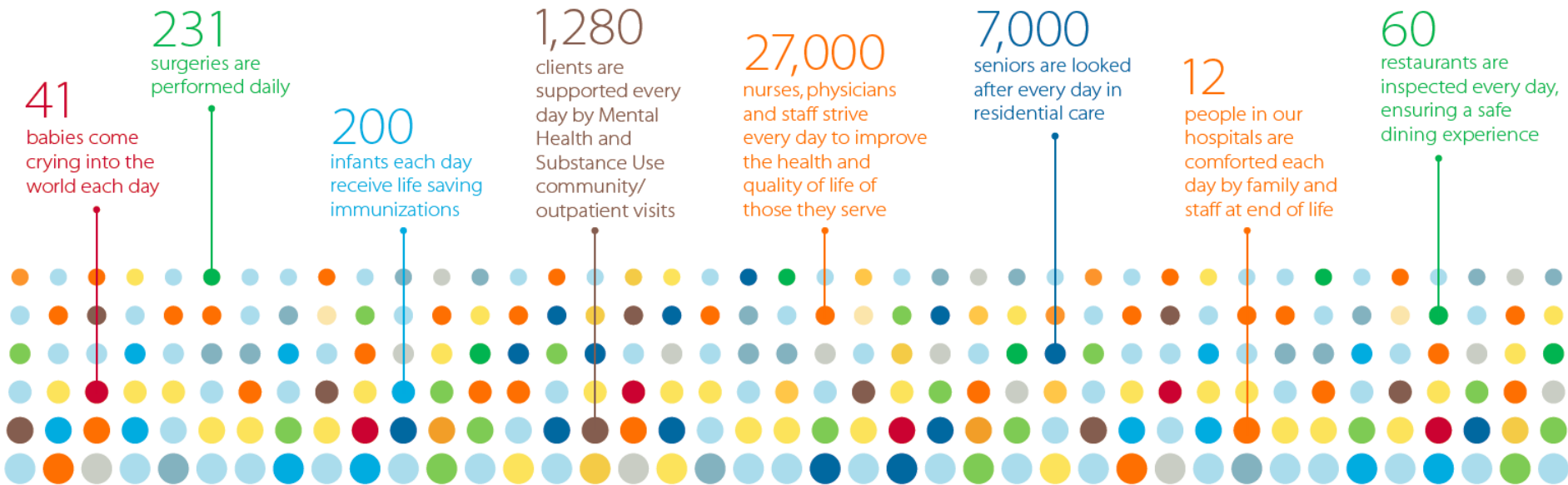


Like many organizations, we are complex

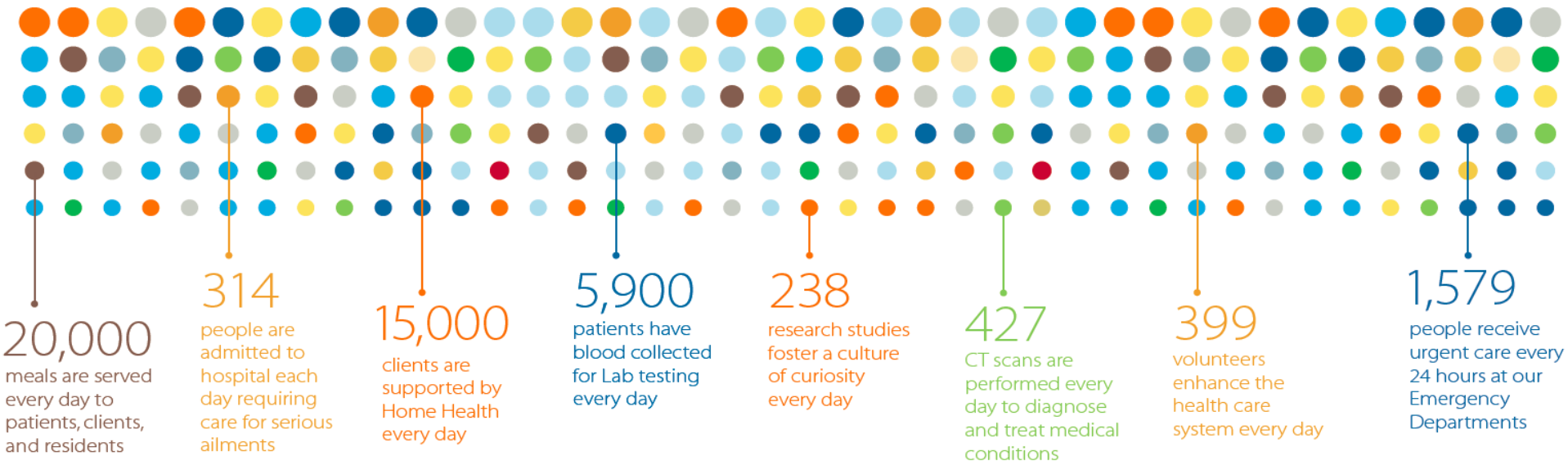
Fraser Health

- Services in 20 municipalities
- 400,000 ER visits per year
- Services provided in > 130 facilities or sites
- 1850 acute care beds
- 1900 residential care beds
- 13,500 deliveries per year
- 90,000 surgeries per year





86,400 seconds equals one day. At Fraser Health, every second counts.



What I Do Matters.

Foundational Systems and Approach



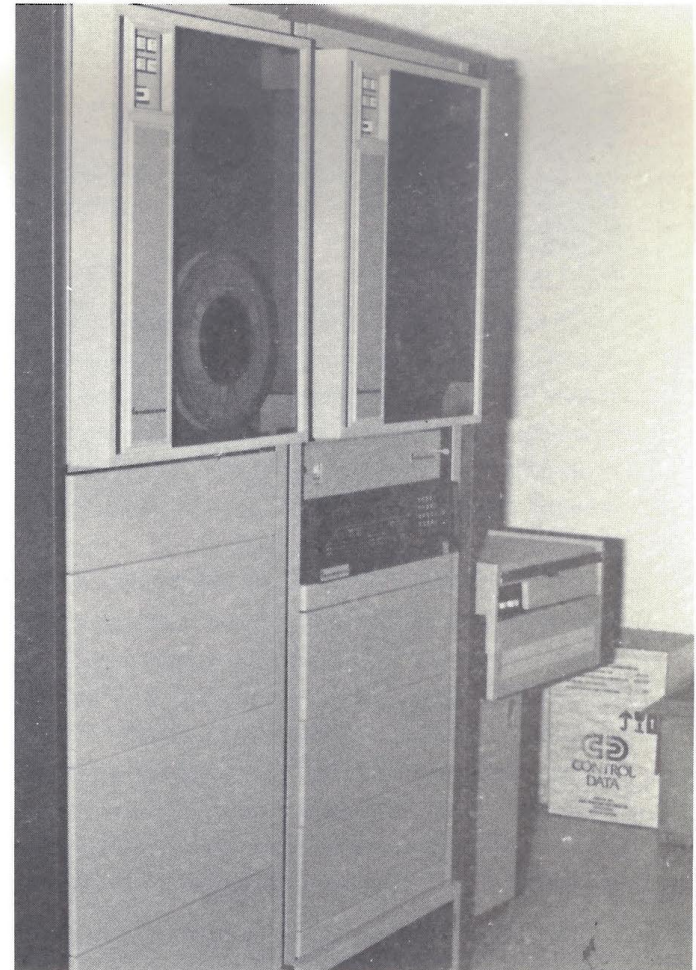
What I Do Matters.



FH Core Vendor Philosophy...



Surrey Memorial is one of twelve hospitals in B.C. recently approved by the Provincial Government to have its own computer. Initially it will perform accounting functions, including payroll, but later can be expanded to other uses. Some of the equipment is shown in one photo, while the other shows the Accounting Supervisor operating one of the seven terminals connected to the computer which is located in the Accounting Department on the main floor.



Acute Care – Functions and Applications 2003

	Fraser North HSDA				Fraser East HSDA				Fraser South HSDA			
Functionality / Site	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 Radology	Tapes	Tapes	Dictaphone		Lanier			Tapes	Dictaphone build & voice			

Acute Care – MEDITECH - 2003

**fraserhealth**
Better health.
Best in health care.

To improve patient services
throughout Fraser Health,
we are building a
new clinical information system.



<http://fhaweb/Initiatives/medCONNECT>

medCONNECT

Better Health Care through Better Information

What I Do Matters.

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)												







What I Do Matters.

myHEALTHSystem Vision

"integrate person-centred health information, across the continuum of care, in support of optimizing health care for Fraser Health citizens and providers"



Community Care – Functions and Applications 2003

	Fraser North HSDA				Fraser East HSDA				Fraser South HSDA			
Functionality / Area	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											

Community Care – Functions and Applications 2014

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Functionality / Area	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											

Functionality / Site	Fraser North HSDA				Fraser East HSDA				Fraser South HSDA						
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Dictation	mModal														
Dictation Radiology	Lanier (speech recognition)														



Clinicians and Administrators

33,000 +
MEDITECH



Clinicians and Administrators

9,600 PACS
1,000 CPA/CPN
GE Centricity



Clinicians and Administrators

3,500
PARIS



Primary Care Clinicians

350
PROFILE



Public Health Clinicians

350
PANORAMA

Meditech

- MPI contains > 3 million persons
- 80 servers, 58 downstream interfaced systems
- Number of diagnostic procedures - 67,000 / month
- Number of prescriptions – 210,136 / month

GE Centricity

- 2,800 + PACS views / day
- 31,320 elective procedures
- 10,503 urgent/emergent

PARIS

- 550,323 community client assessments
- 2.7M+ case notes with 43,786 transactions / day

Intrahealth Profile

- 3,600 patient encounters / day
- 4,500+ care plan enrollments

Overall

- Provider requests > 4,000 / year for changes to support clinical process improvement

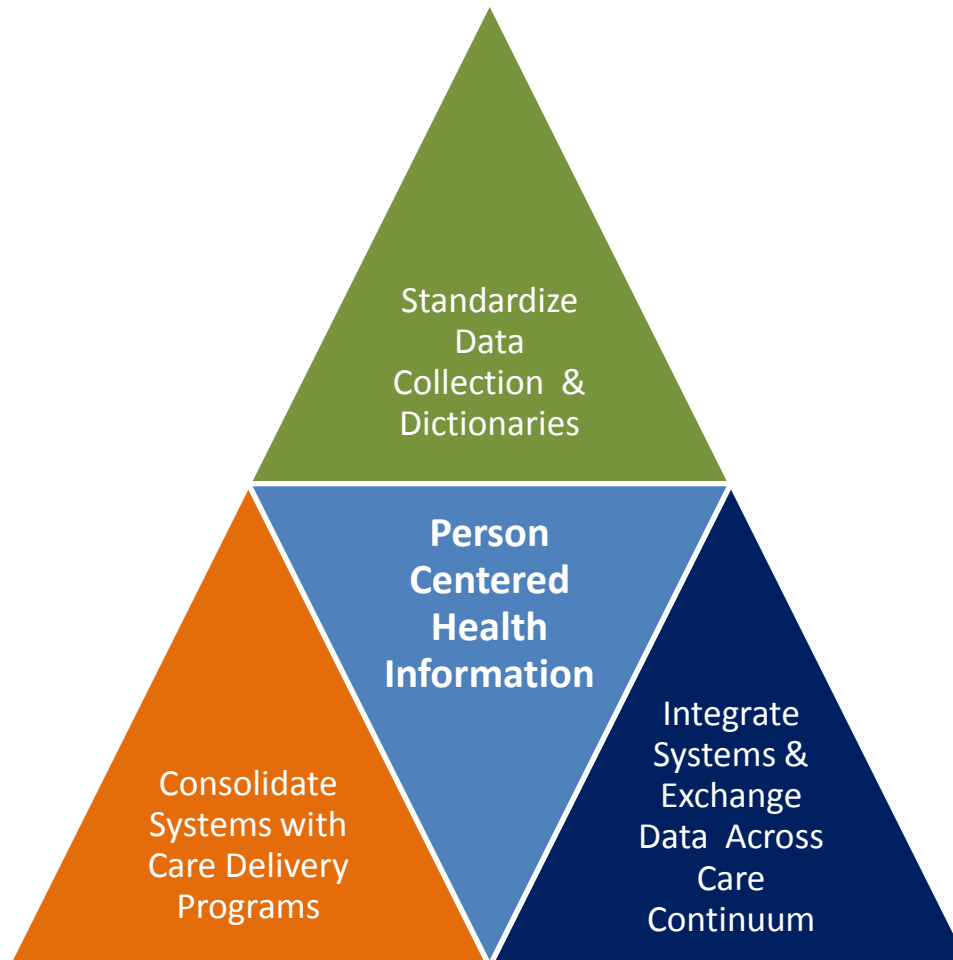
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Health Information Exchange

Fraser Health

Unifying Clinical Information

Clinical Information Systems Journey & Roadmap Fraser Health Authority



Success created a challenge

- FH clinicians do not have easy access to parts of the patient record that reside outside the clinical information system that they use

And an opportunity

- Clinical decision making is better supported with the provision of a complete patient record



UCI - History

- Long standing, strategic requirement for FH clinicians
 - Information in different FH clinical systems must be available to support clinical decision making, and must be tightly integrated into clinical workflow
- Allscripts /dbMotion selected via RFP as Health Information Exchange (HIE) solution
- Phase 1 and 2 of the project complete, leveraging provincial assets

Overview

Clinical requirement:

- Information in different FH clinical systems must be available to support clinical decision making, and tightly integrated into clinical workflow
- The UCI project is delivering the FHA health information exchange solution to achieve this

Opportunity:

- To leverage the provincial HIAL and PLIS to extend the data available to FHA clinicians in Meditech and Paris point of service systems

“All relevant clinical information is available to support clinical decision making at the point of care, with no additional sign-in or patient search, with minimal keying or clicks, and without forcing clinicians to leave their home systems”

Guiding Principles

- Adopt a patient-centric, not system-centric, view of information
- Ensure clinical content is relevant and accessible
- Seek to optimize current investments and workflow (where possible) rather than introducing new core systems
- Avoid the duplication or replication of data
- Protect the privacy and security of sensitive information

Why We Chose Allscripts/dbMotion

- Promotes clinically driven decision making at the point of care
- Canadian presence (Manitoba eHealth)
- Semantic Harmonization semantic mapping for disparate systems
 - Enables the exchange of meaningful information across diverse providers
 - Enriches clinical workflows and provides meaningful data to clinical and analytical systems
 - “Makes sense” of all the disparate codes and vocabularies
 - Aggregates and normalizes all clinical content into a single normalized clinical view
- Supports key principles
- Agent (ability to notify users that data exists from another application)

Governance and Engagement

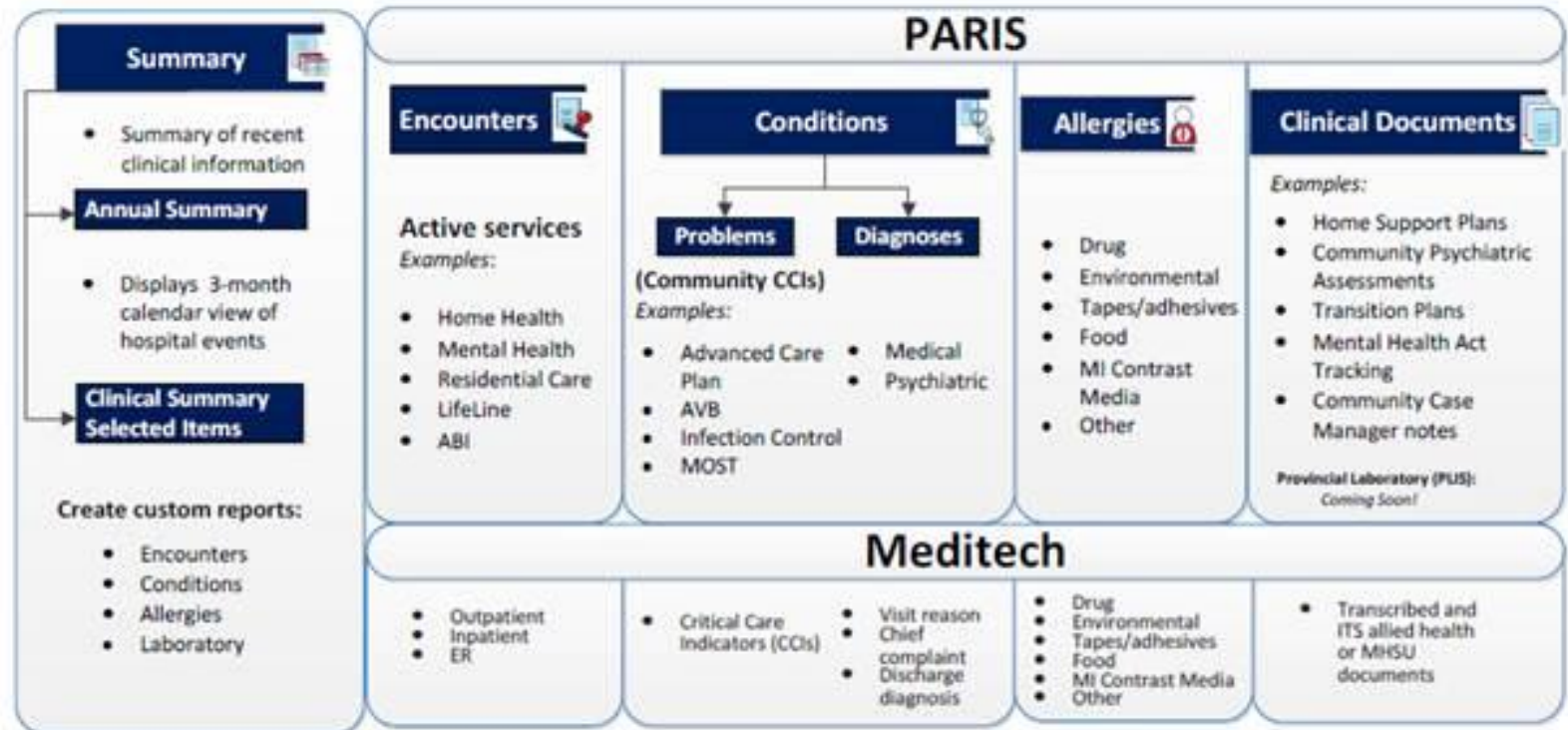
- Working Group (excludes HI, project, MoH and PHSA reps)

DEPARTMENT
Professional Practice – Allied Health
Home Health
Family Physicians
Emergency Services – Co-Chair
Project Clinical Nurse Lead
Older Adult Program
Professional Practice
End-of-Life Care
MHSU
Psychiatry
Emergency Services
Medical Imaging
Pharmacy
FH Physician
Pharmacy Services
Laboratory Services
End-of-Life Care
MHSU
Home Health
PHSA Laboratory Director
Cardiology

UCI Phase 1 and 2

- Phase 1
 - 1A: PARIS users viewing Meditech Data
 - 1B: Meditech users viewing PARIS data integrated with Meditech data
- Phase 2
 - PARIS and Meditech users viewing PLIS data

Current Data in UCI



Demographics – Encounters – Conditions – Problems – Diagnosis - Allergies
Laboratory – Imaging – Clinical Documents

Benefits & Key Outcomes

- Timely access
- Better care coordination
- Efficiency
- Quality of care
- Patient data is instantly integrated and accessed
- Single Sign On for site wide access of data

Future Integration

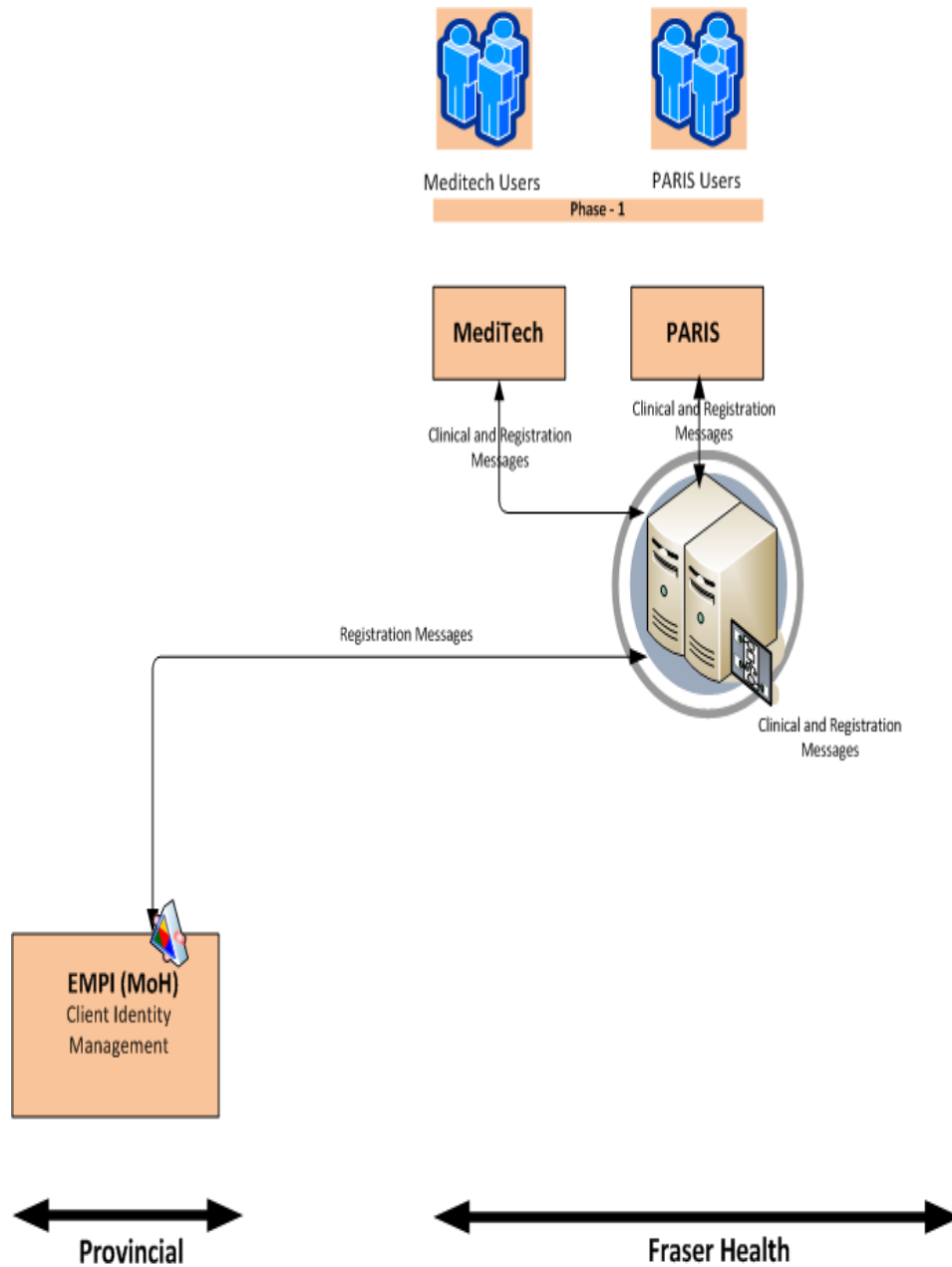
- Intrahealth Profile
 - Active integration with the provincial EMPI
 - Integration with UCI
- Other HA repositories (i.e. CareConnect) as they become available
- Other FH systems
 - As identified and prioritized by the UCI Clinical Working Group
- Other Provincial repositories
 - As identified and prioritized by the UCI Clinical Working Group

Solution Overview

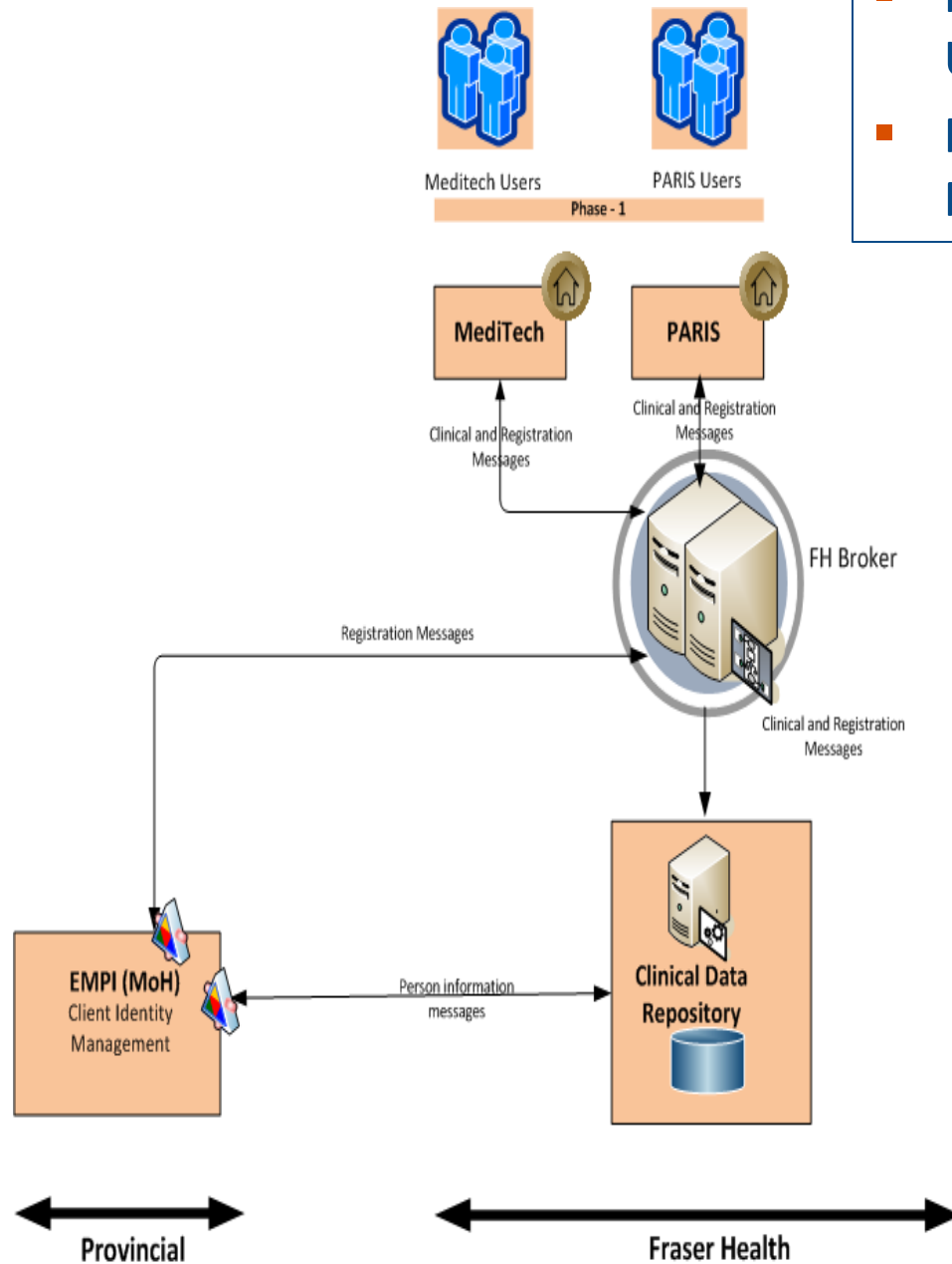


What I Do Matters.

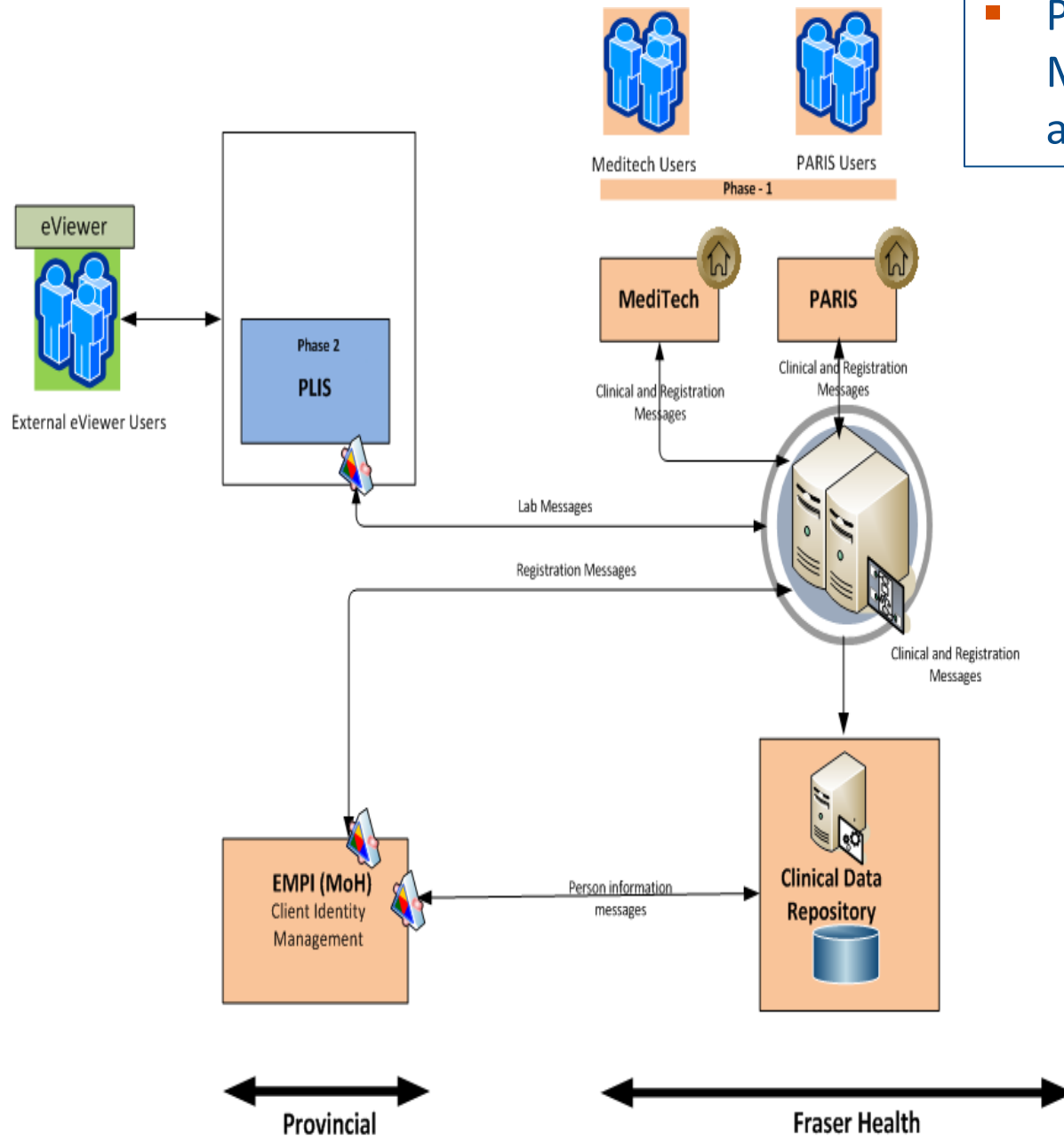


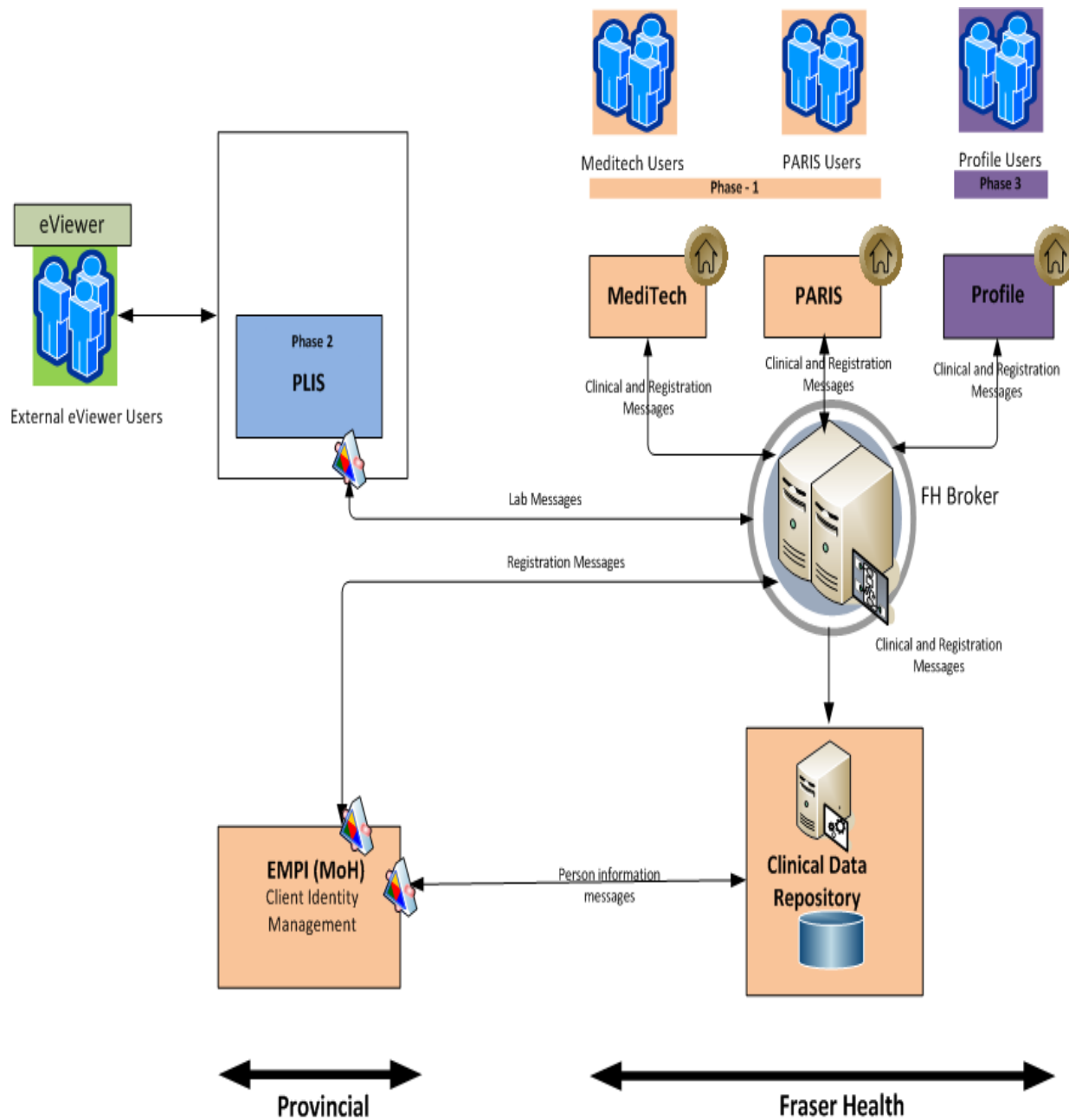


- Phase 1a 3,500 PARIS Users
- Phase 1b 18,000 Meditech Users

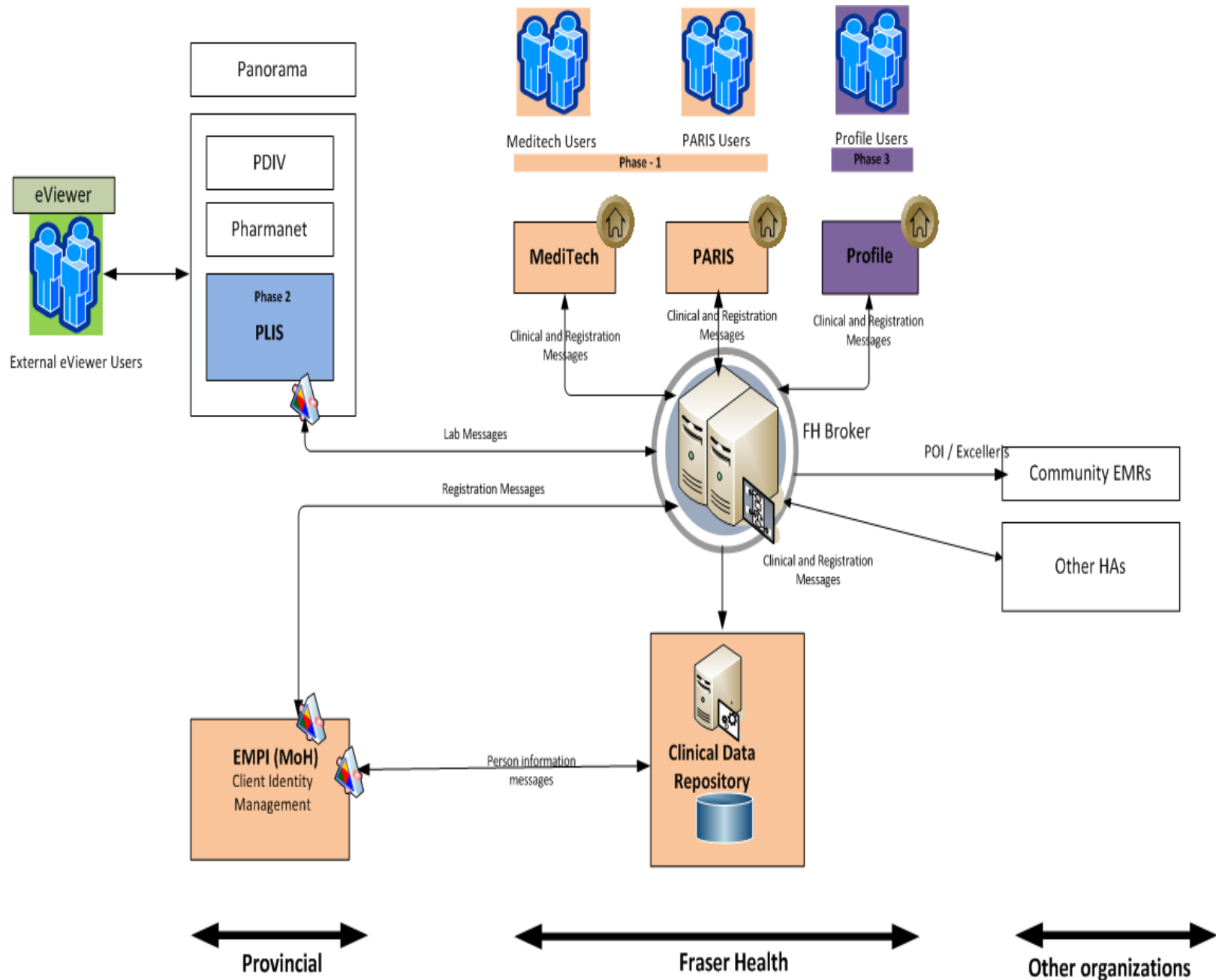


- Phase 2 - 20,000+ Meditech and Paris users access to PLIS





What I Do Matters.



What I Do Matters.

Key Lessons Learned



- Decrease point to point interfaces – use an interface engine / broker
- Back up with disaster recovery and business continuity plan
- If the data is not required in the HCIS for functional purposes, then take the clinicians to the information instead of bringing the data into the HCIS
- ITIL Service Management for incident, problem, and change management
- Perform reporting and analytics outside of your production system as much as possible
- Standardize processes ahead of time
- Do not attempt to load historical data
- Be prepared for extensive testing, particularly data validation
- Integration is a journey, not simply a destination



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