



# Market Analysis and Non-HA Access Framework for BC's eHealth Viewer



Information Management / Information Technology Services

One person. One record. Better health.

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Proud to Serve:





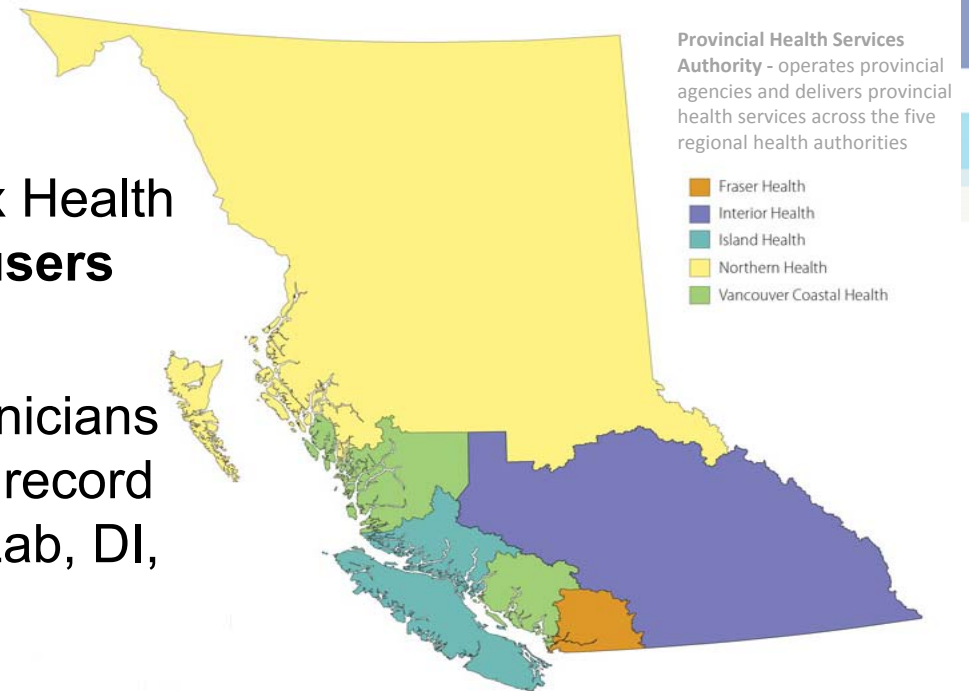
# Overview of the Presentation

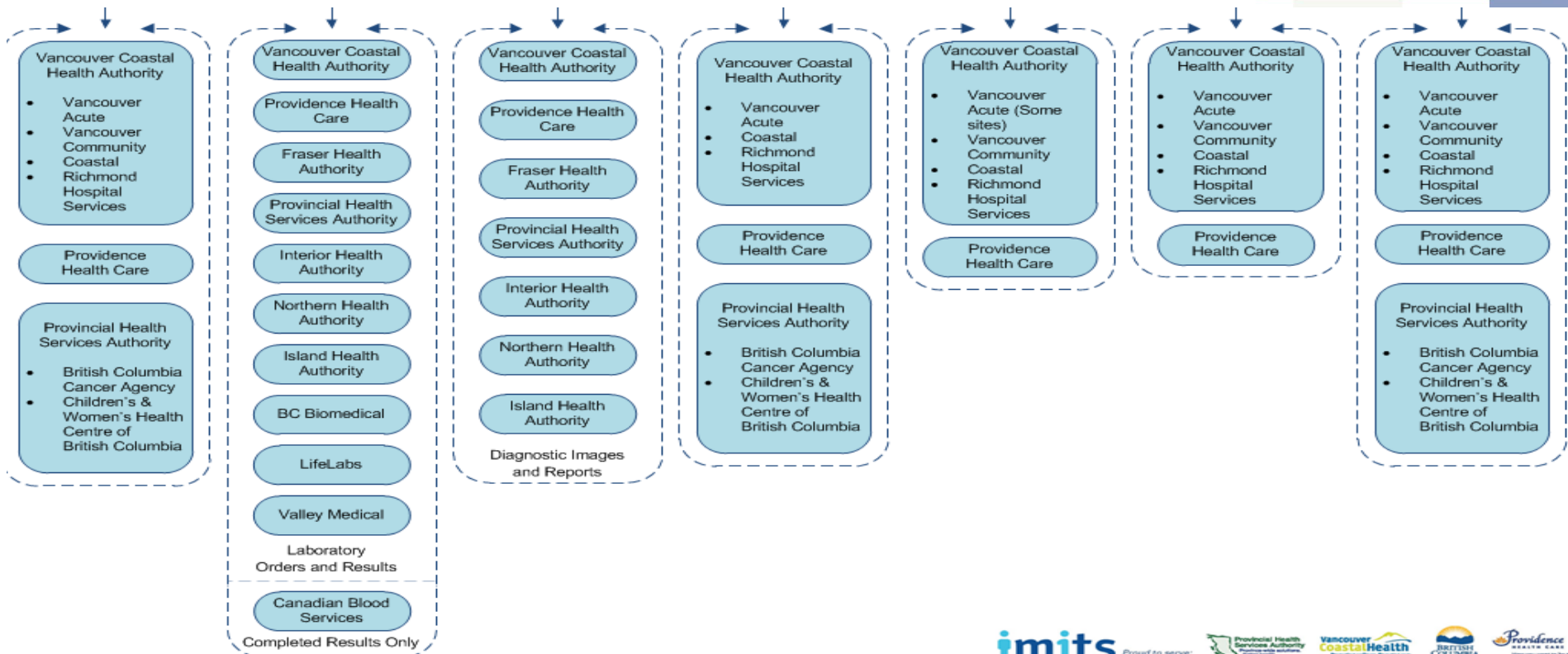
- About CareConnect: Reach and Data Available
- CareConnect Market Analysis:
  - More Integration
  - More Data
  - More Users
- Methods of Access
- Non-HA Access Framework
- Example of CBS Access Using BC Services Card
- Next Steps

# CareConnect: The Provincial eHealth Viewer

CareConnect is BC's EHR viewer:

- Currently deployed within BC's six Health Authorities (HAs) to over **36,000 users**
- Provides access for authorized clinicians to a provincial longitudinal patient record including core eHealth domains: Lab, DI, Shared Health Record.





# CareConnect Market Analysis & Opportunities

More  
Users

1. Within BC's six Health Authorities

2. Outside of BC's six Health Authorities

More  
Data

3. Data Onboarding Requests

4. Specialty Systems Data Onboarding and  
Deployment Services Requests

More  
Integration

5. Request for Integration into Other Systems

6. Simplified & Cost Effective Deployment via a secure  
Web Access

# More Integration...



**imits**

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# eHealth Access & Integration Service Offering

Unified Integration Service Offering Leveraging all eHealth Assets and Ensuring Consumer Options

1. Use of full eHealth Viewer
2. Integration of Portlets
3. Leveraging Data Services
4. Direct Integration with provincial data domains

Easy integration; no UI development, i.e. CST Cerner

More sophisticated systems integrating data into UI, i.e. mConnect/VitalHub

The most complex integration work; appropriate, for example, for projects leveraging distributions vs. gets; HL7

Simplicity of integration

Flexibility of Data Use

Complexity of Conformance

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## #2: Integration of Portlets Encounters and Documents Portlets within Cerner

Icon still available on Menu Bar to launch full CareConnect as an alternative.

Encounters and documents are Menu options. Integration is more seamless to the Clinician when launching a CareConnect page (portlet) from within Cerner.

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# More Data...



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Data Onboarding Requests	Source of Request	
<b>Pharmanet data</b>	<p data-bbox="1234 451 1766 553">As prioritized by the COC in 2012/2013</p> <p data-bbox="1234 623 1808 725">Also requested by Healthcare Providers throughout all HA's</p>	
Immunization history (Panorama/PARIS)		
PLIS - add ECG's and pulmonary function tests		
Cardiology reports - ECG, Cath lab reports from Excelleris and/or MUSE and other systems		
Complete Community care encounter summaries e.g. Advance Directives and SAMI		
Complete Specialist consultations		
Complete Hospital discharge summaries		
Complete Allergies / alerts		
Emergency encounter summaries		
Complete Operative reports		
Complete Hospital admissions		
Private Imaging – CML, Greig Associates, etc		<p data-bbox="1234 1019 1913 1122">Requested by Healthcare Providers throughout all HA's.</p> <p data-bbox="1234 1130 1955 1200">Note - Private Imaging also requested by COC members and Cardiac Registry</p> <p data-bbox="1234 1300 1934 1325">Onboard remaining data from PHSA Specialty Labs (Gyne cytology, Etc.)</p>
Encounters from additional HA's: ➤ <b>FHA (highest priority)</b> ; PHSA (outstanding data); VIHA; IHA; NHA		
Documents from additional HA's: ➤ FHA (including PARIS data and documents from M*Modal or UCI); PHSA(outstanding data); VIHA; IHA; NHA		
Cardiac Registry Information <i>Including Dr. Fife CMIO for VIHA</i>		
Nutritional Counselling Reports		
Sleep Study Results		
Alerts from PARIS		
Smaller Private Lab Data from non-LifeLabs companies e.g. Brooks Medical		
PHSA Specialty Labs		

More Users...

**eHealth Viewer  
Requests**



**imits**

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# Access Requests Supporting Continuity of Care Beyond the Six HAs



Correctional Service Canada

Midwives Association of British Columbia



WORK SAFE BC

Timely access = Less wait times for receiving care, return to work sooner, and less payout

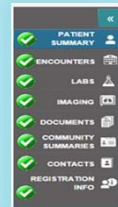
- Onboarding Yukon Data
- Deployment to healthcare providers

## Private Practice Physicians

- Assist with determining best care plan - for the patient for post-surgery recovery, injury, etc.
- Specialist Consult Reports i.e. Ortho
- Consult Reports
- Historical Consult Reports - Orthopaedic, Psychiatry, Neurology, Urology



- ❑ Long term care & residential facilities
- ❑ Rehabilitation centres
- ❑ Community based contracted services affiliated with HA's



The ability to view prior lab results from another testing facility will provide historic information about the patient's antibodies and exposure which can affect the recommended course for care.



- PATIENT SUMMARY
- ENCOUNTERS (11)
- DOCUMENTS (4)
- IMAGING



Canadian Association of Pathologists

- PATIENT SUMMARY
- LABS



- PATIENT SUMMARY
- ENCOUNTERS (11)
- DOCUMENTS (4)
- LABS
- IMAGING
- COMMUNITY SUMMARIES

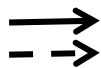
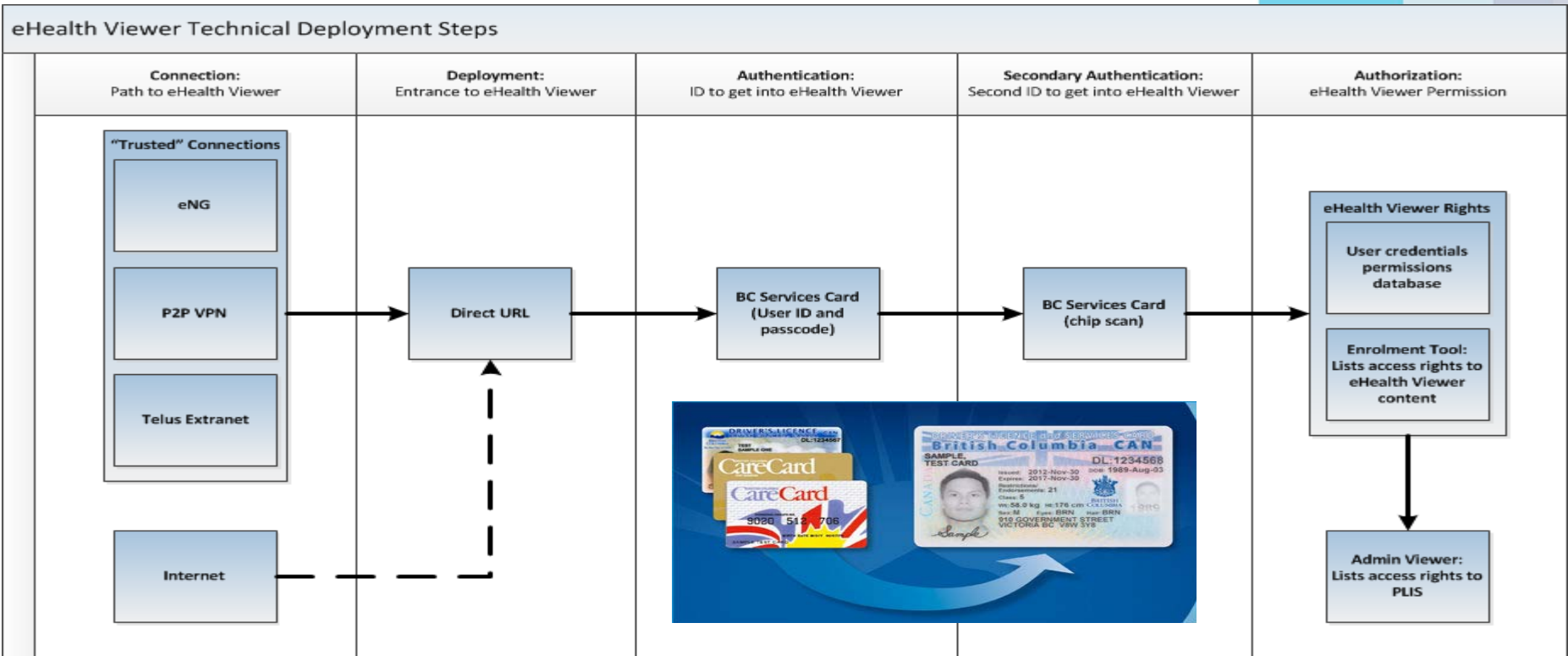
# Method of Access to Provincial eHealth Data

Community	System Access
HA Clinician (with access to CIS)	<b>Direct Integration through CIS</b>
Community Clinicians (with EMR)	<b>Direct Integration through EMR</b>
HA Clinicians without access to CIS	
Non-HA Organizations	
<ul style="list-style-type: none"> <li><b>Canadian Blood Services</b></li> </ul>	<b>Approved Project</b>
<ul style="list-style-type: none"> <li>Private lab pathologists</li> <li>First Nations Health Service Organizations</li> <li>Corrections Canada</li> <li>Patient Transfer Network</li> <li>WorkSafe BC</li> </ul>	<p>Framework easily expanded to like organizations</p> <p><b>Provider Portal</b></p>
<p>Community Clinicians without EMR (or where content is not available through direct integration)</p> <ul style="list-style-type: none"> <li>Community Clinicians</li> <li>Pharmacists</li> <li>Physiotherapists</li> <li>Chiropractors</li> <li>Private Radiology Clinics</li> <li>Midwives</li> </ul>	<p>Technical foundation can be leveraged by like clinicians; additional effort required to support decentralized model (ie: opportunity to leverage similar process for PLIS access through EMR)</p>

# Non-HA Access Framework

1. Technical Deployment
  - How will a user gain entrance to the eHealth Viewer?
2. Agreements
  - What agreements must be in place?
3. User Access
  - How will a user get an account?
4. Privacy
  - How to maintain people's privacy?
5. Security
  - What needs to be performed to ensure security?
6. Operational
  - What are the operational support requirements?
7. Engagement and Governance process
  - What is the engagement and governance process?

# #1: Technical Deployment



→ Currently envisioned process for the near term

- - - Future opportunity if stakeholders confirm as requirement

## #2. Agreements

The following documents must be updated/completed:

- PLIS Designation Order
- Privacy Impact Assessment (PIA) and related MoH Privacy Conformance Gap Analysis
- Information Sharing Agreements between MoH and CBS
- Provincial Access Model
- CBS / PHSA Agreement (detailing roles and responsibilities)
- End User Agreement (detailing responsibilities)



# #3-#6 PHSA and CBS

## Summary of Responsibilities

	PHSA – eHealth Ops	CBS
#3. User Access	<ul style="list-style-type: none"> <li>Provide access to enrolment tools, train the trainer, and provide ongoing operational support to CBS admins</li> </ul>	<ul style="list-style-type: none"> <li>Enrolment of CBS staff</li> </ul>
#4. Privacy	<ul style="list-style-type: none"> <li>Provide necessary tools, train the trainer, and provide ongoing operational support to CBS privacy staff</li> <li>Provide the process and workflow for breach management</li> </ul>	<ul style="list-style-type: none"> <li>All users will attest to having accessing patient record on a need to know basis (current practice)</li> <li>Provide all end user training</li> <li>Responsible for conducting audits, and participating in breach investigations and responses</li> </ul>
#5. Security	<ul style="list-style-type: none"> <li>Complete STRA</li> <li>Participate in Gap Analysis</li> </ul>	<ul style="list-style-type: none"> <li>Participate in STRA</li> <li>CBS completes Gap Analysis</li> </ul>
#6. Operational	<ul style="list-style-type: none"> <li>Tier 2 and direct Change Management</li> </ul>	<ul style="list-style-type: none"> <li>Tier 1 technical and end user support</li> </ul>

## Next Steps

More  
Users

- Provide access to Canadian Blood Services as an early adopter; evaluate clinical benefits and technical approach to inform further expansion to non-HA groups

More  
Data

- Onboard additional data as directed by MOH

More  
Integration

- Complete Cerner integration of Portlets
- Complete integration for mobile access

## What our users have to say....

“I wish to thank you for getting BC Cancer Agency information on line. This makes an enormous difference to those of us who work in palliative care. We very much appreciate having access to this information!”

*“It helped me make a clinical decision regarding a patient presenting with Chest Pain, who had prior cardiac investigations at another facility.”*

“It makes my job easier, it prevents me from having to bother the staff at bedside to give me the information.”

“Saves time and increased confidence in having most recent patient info.”

“Better, more comprehensive access to my patient's health data.”



***“Ease of access to results is so much better.”***

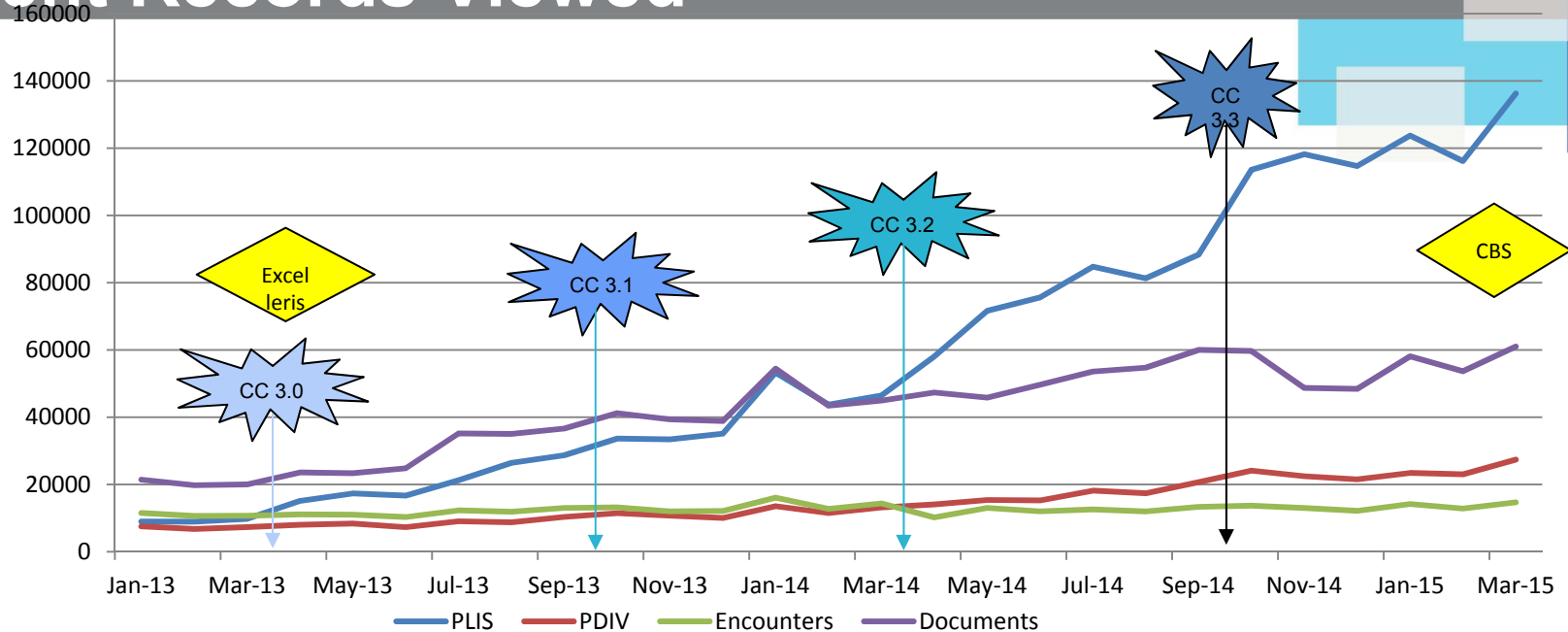
# Appendix

# CareConnect: Reach

Health Authority	Number of users (approximate)			
	September 2013	January 2014	September 2014	February 2015
VCH & PHC	6,334	6,606	7,221	8,890
PHSA	3,428	3,583	4,605	4,813
VIHA	2,449	2,449	2,906	3,002
FHA	141	378	2,100	2,464
NHA	101	1,100	1,291	1,354
IHA	2,321	12,923	14,724	15,611
<b>Total</b>	<b>14,774</b>	<b>27,039</b>	<b>32,847</b>	<b>36,134</b>

- Significant increase at the end of 2013 with large NHA and IHA deployments
- Since January 2014 slower but steady

# Patient Records Viewed



- Peaks and increases coincide not only with new user deployments, but largely with onboarding new valuable data or with clinical change management activities around system upgrades

# User Deployment Trends

- Trends are emerging showing where value is being realized

High Value User Groups	Description	High Value
Access / Triage / Transition Groups	Intake, Pre-Admission clinics, Referral Teams, Discharge Coordination	✓
Emergency Rooms, Urgent Care Services, Primary Care	First points of intake into Health System, often have limited or no history	✓
Patient Transfers / HA Geography Edge	Patients seen in other HA's, eg, Specialty services with follow-up in other HA or Community	✓
Care Teams that cross HA boundaries	Cancer Agency clinicians working in concert with HA and Primary Care clinicians	✓
Support Staff	Supporting clinical workflow	✓
Specialists	Collateral results to augment HA data	✓
Inpatient Care	Inpatient surgical teams	✗