

**VITL Update  
to the  
State of Vermont  
Health Care Oversight  
Committee**

November 14, 2013



# FY13 Accomplishments

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- **Electronic Health Records (EHR)**
  - Assisted 911 primary care providers go live on an Electronic Health Record (EHR)
  - Assisted 443 primary care providers meet meaningful use
  - Implemented a new relationship with the Blueprint for Health
- **Interfaces**
  - All but one of Vermont's hospitals are now connected to the VHIE (Vermont Health Information Exchange)
  - Connected Dartmouth Hitchcock Medical Center to the VHIE for ADT (admissions/discharges/transfers) and lab results
  - Went live with 190 interfaces in FY13 compared to 51 interfaces in FY12 – a 373% increase
  - Live with immunizations to the VT Department of Health (11)



# FY13 Accomplishments (continued)

- **Interfaces (continued)**
  - Live with lab results to a first nursing home
  - Completed the grant with Bi-State primary care (the FQHCs)
- **Provider Portal**
  - Implemented 6 pilot sites:
    - VITLAccess
    - Medication History
    - Consent Policy
- **Infrastructure**
  - Contracted with a major national computer infrastructure hosting vendor which allows us to host our own applications
  - Installed an interface engine tool to provide new messaging capabilities which allows us to build specialized interfaces



# FY13 Accomplishments (continued)

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- **Infrastructure (continued)**
  - Purchased and installed an enterprise data warehouse from Microsoft which will allow us to perform data analytics and reporting
- **Other**
  - Selected by OneCare VT to serve as their HIE infrastructure
  - Legislation passed empowering VITL to certify providers in VT for meaningful use of EHRs and authorizing VITL to develop criteria for connectivity to the VHIE





**Key:**

-  Operational
-  In Progress
-  Anticipated

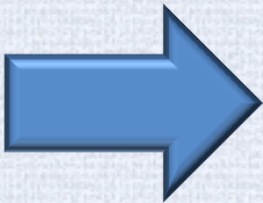
**Minimum Data Set**

- \* Patient Demographics
- \* Lab Test Results
- \* Admissions, Discharges & Transfers
- \* Radiology Results
- \* Clinical Summaries
- \* Medication History
- \* Pathology Reports
- \* Radiology Images
- \* Immunization



Using 20 different EHR Systems

2011	2012	2013
<ul style="list-style-type: none"> <li>•FQHC: 75%</li> <li>•HA: 57%</li> <li>•HI: 79%</li> <li>•VAHHA: 100%</li> </ul>	<ul style="list-style-type: none"> <li>•FQHC: 100%</li> <li>•HA: 93%</li> <li>•HI: 100%</li> <li>•VAHHA: 100%</li> </ul>	<ul style="list-style-type: none"> <li>•FQHC: 100%</li> <li>•HA: 100%</li> <li>•HI: 100%</li> <li>•VAHHA: 100%</li> </ul>



**Sending Clinical Data to the VHIE**

- 13 out of 14 Hospitals are sending clinical data to the VHIE
- 8 out of 8 FQHC's are sending clinical data to the VHIE
- 0 out of 10 VAHHA's are sending clinical data to the VHIE

•FQHC: Federally Qualified Health Center EHR Go-Live Dates  
 •HA: Hospital Ambulatory EHR Go-Live Dates  
 •HI: Hospital Inpatient/HIS EHR Go-Live Dates  
 •VAHHA: VAHHA Member EHR Go-Live Dates

# HOSPITAL INTERFACE STATUS



## PROGRESS

As of January 15, 2013

	VERMONT HOSPITALS														OTHER
	BRATTLEBORO MEM. HOSP.	COPLEY HOSPITAL	CENTRAL VT. MEDICAL CTR.	FLETCHER ALLEN HEALTH CARE	GIFFORD MEDICAL CTR.	GRACE COTTAGE HOSPITAL	MOUNT ASCUTNEY HOSPITAL	NORTH COUNTRY HOSPITAL	NORTHWESTERN MEDICAL CTR.	NORTHEASTERN MEDICAL CTR.	PORTER MEDICAL CENTER	RUTLAND REGIONAL MED. CTR.	SPRINGFIELD HOSPITAL	SOUTHWESTERN VT MED. CTR.	DARTMOUTH HITCHCOCK MED. CTR.
ADT <sup>†</sup>	◆	◆	◆	■	◆	■	■	■	◆	*	◆	◆	◆	*	■
LAB TEST RESULTS	◆	◆	◆	*	◆	■	■	■	◆	*	◆	◆	◆	*	■
RADIOLOGY REPORTS	◆	◆	◆	*	◆	■	■	■	*	*	◆	◆	◆	*	*
TRANSCRIBED REPORTS <sup>‡</sup>	◆	◆	◆	*	◆	■	■	■	*	*	◆	◆	◆	*	*
MEDICATION HISTORY	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PATHOLOGY REPORTS	*	◆	■	■	*	■	■	■	*	*	◆	◆	*	*	■
RADIOLOGY IMAGES	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
IMMUNIZATION	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
CCD <sup>∞</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*


- ◆ COMPLETE – The interface is live
- IN PROGRESS – The interface is being developed.
- \* Pending – Not actively working on the interface.

<sup>†</sup> Admissions/Discharges/Transfers

<sup>‡</sup> Discharge Summaries/ Endoscopy/ Cardiology/ Emergency Department Reports

<sup>∞</sup> Continuity of Care Documents

# HOSPITAL INTERFACE STATUS

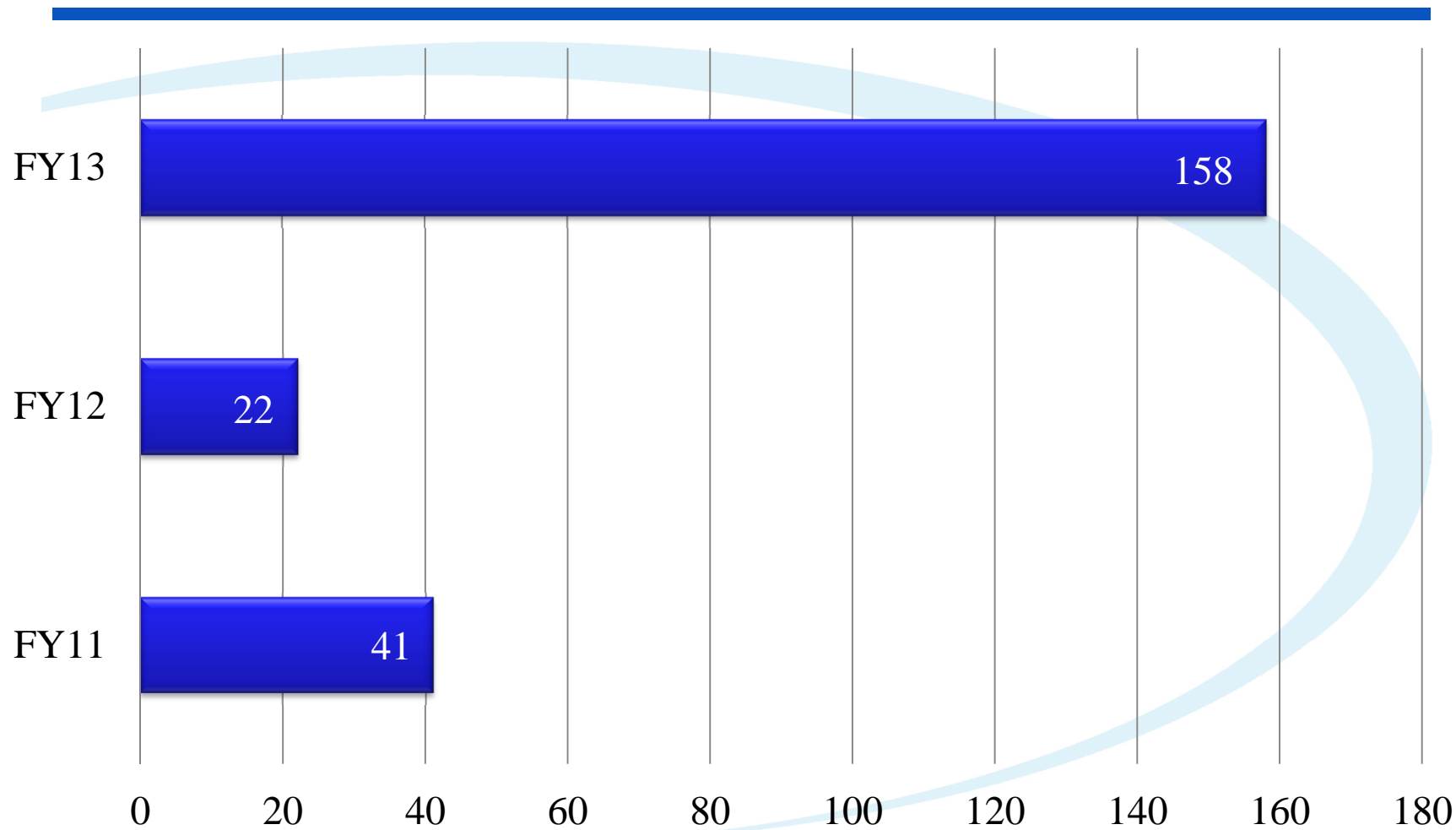
 <b>PROGRESS</b> As of November 14, 2013	VERMONT HOSPITALS														OTHER
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ADT†	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
LAB TEST RESULTS	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
RADIOLOGY REPORTS	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
TRANSCRIBED REPORTS‡	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
MEDICATION HISTORY○	■	■	■	■	■	■	■	◆	■	■	■	■	■	■	■
PATHOLOGY REPORTS	*	◆	■	◆	◆	◆	◆	◆	■	■	◆	◆	*	*	■
RADIOLOGY IMAGES	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
IMMUNIZATION	■	■	■	■	■	■	■	*	■	■	■	■	■	*	■
CCD∞	*	*	*	■	*	■	■	*	*	■	*	*	*	*	*

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- † Admissions/Discharges/Transfers
- ‡ Discharge Summaries/ Endoscopy/ Cardiology/ Emergency Department Reports
- ∞ Continuity of Care Documents
- Medication History is Live. Deployed to Selected Pilot Sites



# Ambulatory Interface Chart



Total Interfaces:  
221 representing 840 providers from 87 provider organizations



**Key:**

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- ▶ In Progress
- ◆ Anticipated

**Minimum Data Set**

- \* Patient Demographics**
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- \* Medication History**
- \* Immunization**



**EHR's**

- ✔ Primary Care
- ✔ Hospitals
- ✔ FQHCs
- ✔ Home Health
- ◆ Mental Health, Long Term Care, Specialists, Other Providers

**Messaging**

- ✔ 66 Current Users
- ▶ Other Providers

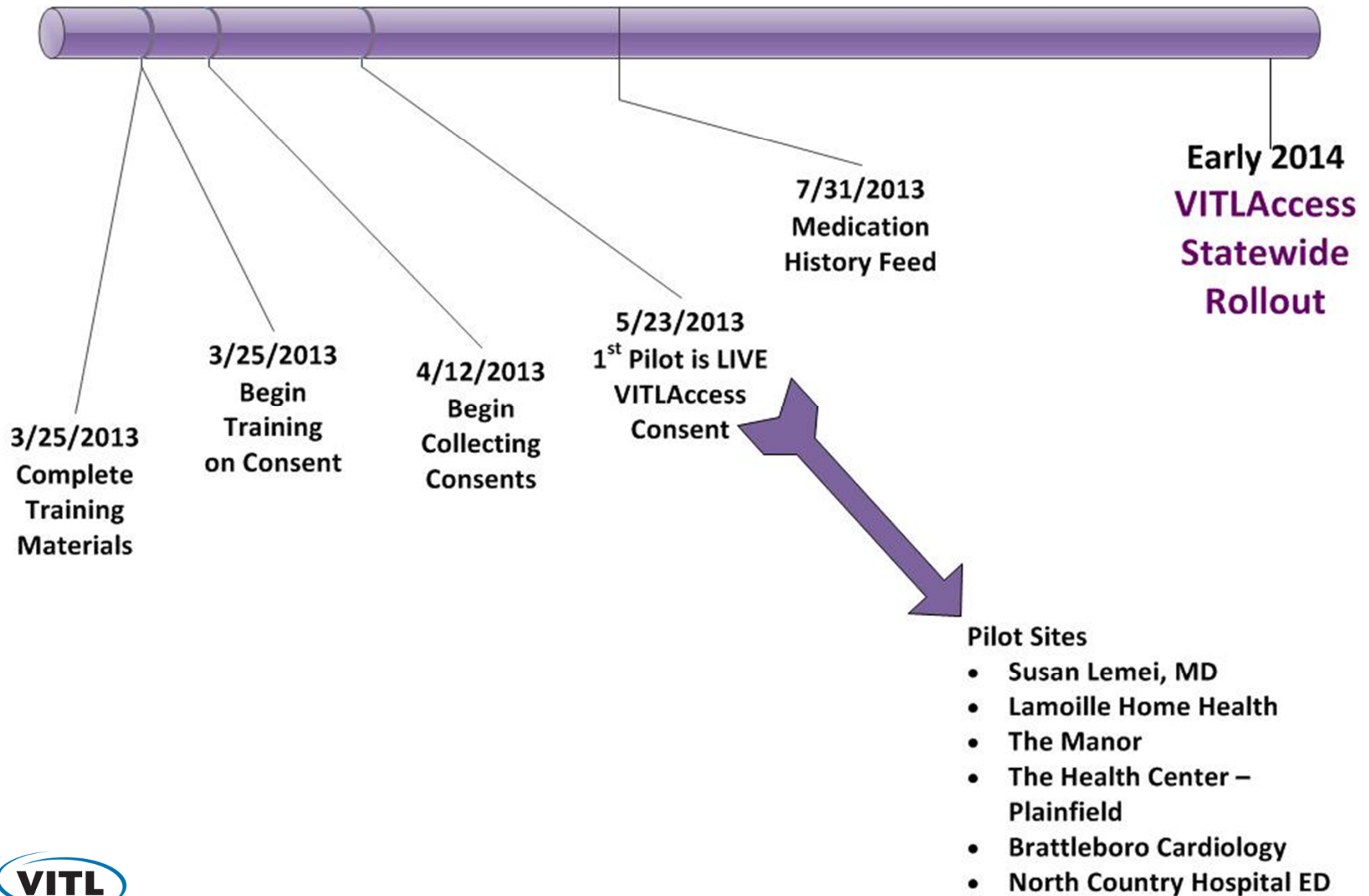
**Interfacing**

- ✔ Hospitals
- ✔ Primary Care
- ✔ FQHCs
- ▶ Home Health
- ◆ Mental Health Facilities, Other
- ▶ Public Health
- ▶ Other HIE



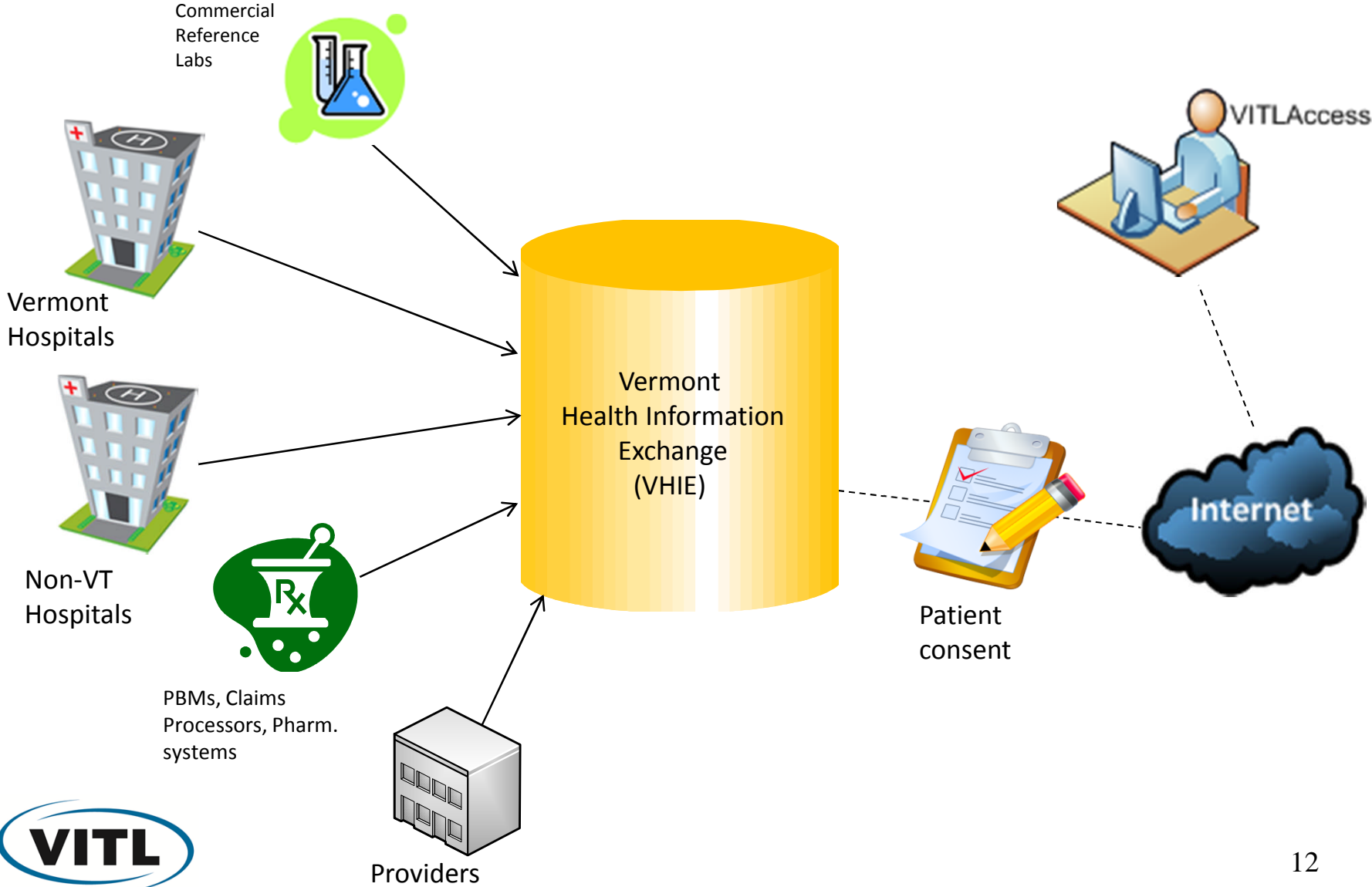
## VITL Milestones 3/1/13 – 3/31/14

VITLAccess



Revised: 11/7/2013

# VITL Access



# VITLAccess

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- VITLAccess is a window into the VITL clinical repository
- VITL has been building interfaces and the clinical repository for **9** years
- Processing **2.2 million** clinical messages per month
- VITL Support Center operational for **4** years
- VITLAccess (ProAccess) has been operational for **14** years
- Expected number of users is **5000-10,000**



# VITL Health Information Exchange Implementation Best Practice

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- Training
- Testing
  - Quality analysis
  - Unit testing
  - System testing
- Pilot sites – discovery before deployment
- 24 x 7 support
- Incremental implementation
- Ongoing training



# Security

- VITL's technology infrastructure is Medicity, one of the largest HIE vendors in the US
- All data in transit across the HIE is encrypted
- Patient information is not comingled and is stored in separate data vaults by provider organization
- The network is monitored 24/7 for signs of intrusion
- Every attempt to access the HIE is logged
- Medicity's data centers are SSAE-16 certified: best practice in healthcare and exceeds HIPAA standards
- Medicity has never had a breach
- VITL is seeking FIPS 200 compliance, a Federal information systems security level that covers 17 domains and exceeds HIPAA requirements



# Medicity Infrastructure

- Medicity
  - HIE company since 2000
  - State HIEs: 9
  - Regional HIEs: 12
  - Enterprise HIEs: 91

- Capabilities and Functions

- |  |  |
|--|--|
| ● Clinical Data repository                                 | ■ Medication History                             |
| ■ Consent Management                                       | ● Direct (secure messaging)                      |
| ● Master Person Index<br>(within and across organizations) | ○ Transitions in Care module<br>(in development) |
| ■ Record Locator Service                                   | ○ Patient Portal                                 |
| ■ Provider Portal/Query functionality                      | ● Secure Network                                 |
| ○ Referral Management                                      | ● Disaster Recovery                              |



Key: ● Operational    ■ In Progress/Live in Pilot Sites  
○ Not Scheduled





**Key:**

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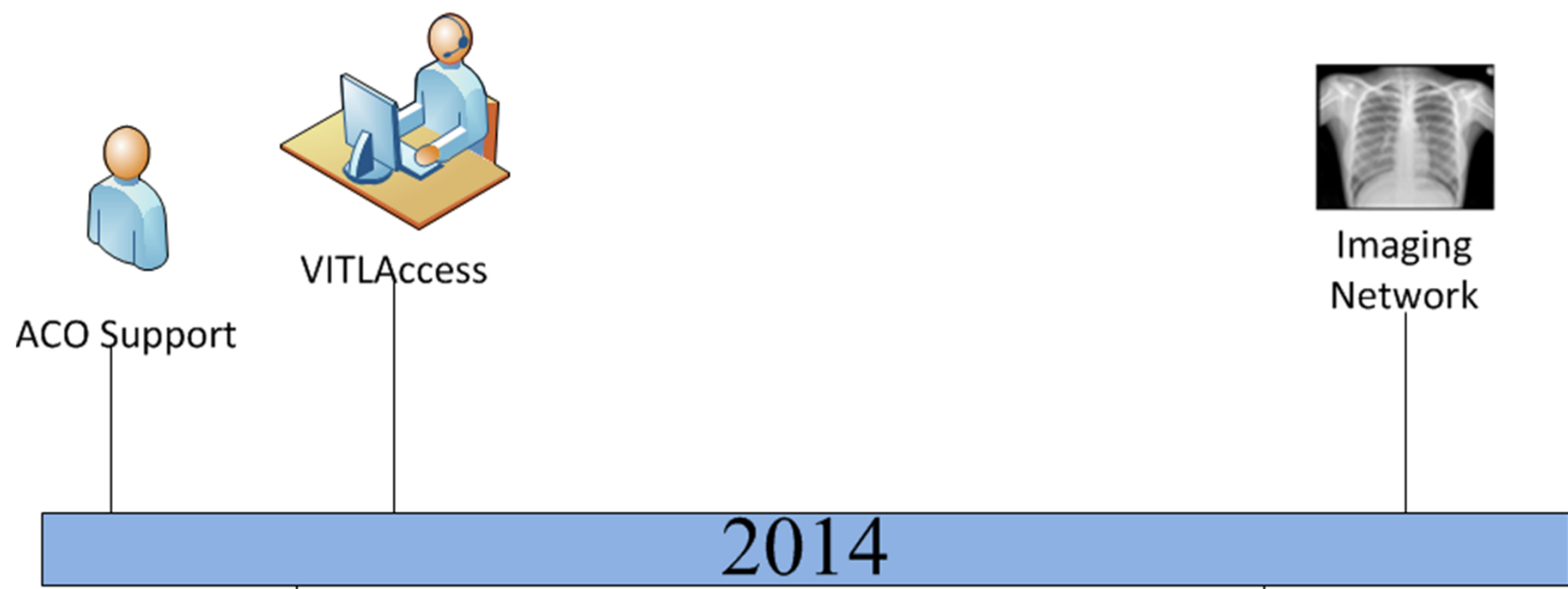
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<p><b>EHR's</b></p> <ul style="list-style-type: none"> <li><span style="color: green;">✔</span> Primary Care</li> <li><span style="color: green;">✔</span> Hospitals</li> <li><span style="color: green;">✔</span> FQHCs</li> <li><span style="color: green;">✔</span> Home Health</li> <li><span style="color: red;">◆</span> Mental Health, Long Term Care, Specialists, Other Providers</li> </ul>	<p><b>Messaging</b></p> <ul style="list-style-type: none"> <li><span style="color: green;">✔</span> 66 Current Users</li> <li><span style="color: blue;">▶</span> Other Providers</li> </ul>	<p><b>Interfacing</b></p> <ul style="list-style-type: none"> <li><span style="color: green;">✔</span> Hospitals</li> <li><span style="color: green;">✔</span> Primary Care</li> <li><span style="color: green;">✔</span> FQHCs</li> <li><span style="color: blue;">▶</span> Home Health</li> <li><span style="color: red;">◆</span> Mental Health Facilities, Other</li> <li><span style="color: blue;">▶</span> Public Health</li> <li><span style="color: blue;">▶</span> Other HIE</li> </ul>
<p><b>Core Infrastructure</b></p>		
<ul style="list-style-type: none"> <li><span style="color: green;">✔</span> Master Person Index</li> <li><span style="color: green;">✔</span> Clinical Data Repository</li> <li><span style="color: green;">✔</span> Disaster Recover</li> <li><span style="color: green;">✔</span> VITL Direct</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: blue;">▶</span> Query Functionality/ Provider Portal (VITL Access)</li> <li><span style="color: blue;">▶</span> Consent Management</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: blue;">▶</span> Medication History</li> <li><span style="color: red;">◆</span> Transitions in Care Module</li> <li><span style="color: red;">◆</span> Patient Portal</li> <li><span style="color: red;">◆</span> Referral Management</li> </ul>





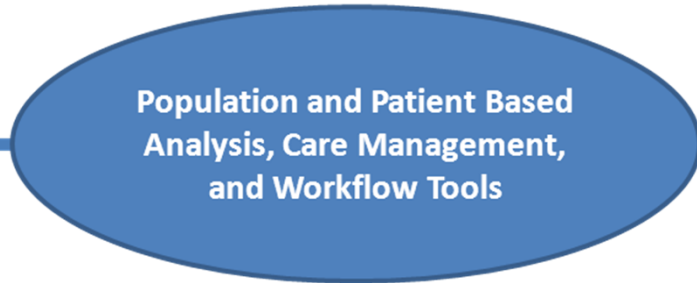
# OneCare Vermont



ACO Attributed Population



Program Sponsors/Payers



# Medication History

23 y/o MALE <30

Pt. Info FaceSheet Reports Meds Encounters Tests Documents

Date Range: Last 9 Months Prescribed By: All

9 Possible Non-Compliance Alerts  
4 Duplication Alerts

Meds History last updated: 11/06/2013 11:55a

Edit Columns

PHARM	LAST FILL	FILL#	RX#	MEDICATION STRENGTH	QTY	DAYS	PRESCRIBED BY
	11/05/2013	10	1	clindamycin 300 mg CAP [Cleocin HCl]	40	10	WEYLMAN, LAURA
	11/05/2013	1	3	montelukast 10 mg TAB [Singulair]	30	30	WEYLMAN, LAURA
	10/18/2013	3	4	acetaminophen-codeine 300 mg-30 mg TAB [Tylenol with Codeine #3]	12	4	WEYLMAN, LAURA
	10/15/2013	2	4	acetaminophen-codeine 300 mg-30 mg TAB [Tylenol with Codeine #3]	10	4	WEYLMAN, LAURA
	10/15/2013	1	5	acetaminophen-codeine 300 mg-30 mg TAB [Tylenol with Codeine #3]	10	2	WEYLMAN, LAURA
	10/18/2013	1	6	diclofenac topical 1% GEL [Voltaren Topical]	100	6	WEYLMAN, LAURA
	09/27/2013	4	7	omeprazole 20 mg DRC [PriLOSEC]	180	90	Unknown
	09/02/2013	6	8	carBAMazepine 200 mg ERT [TEGretol XR]	180	90	Unknown
	09/02/2013	6	9	carBAMazepine 100 mg ERT [TEGretol XR]	180	90	Unknown
	08/15/2013	4	11	cefdinir 300 mg CAP [Omnicef]	14	7	Unknown
	06/17/2013	5	10	carBAMazepine 300 mg ERC [Carbatrol]	60	30	Unknown
	05/13/2013	2	12	metroNIDAZOLE 500 mg TAB [Flagyl]	28	7	Unknown
	05/01/2013	1	13	EPINEPHrine 0.3 mg KIT [EpiPen 2-Pak]	2	2	Unknown
	03/19/2013	2	14	levofloxacin 500 mg TAB [Levaquin]	10	10	WEYLMAN, LAURA



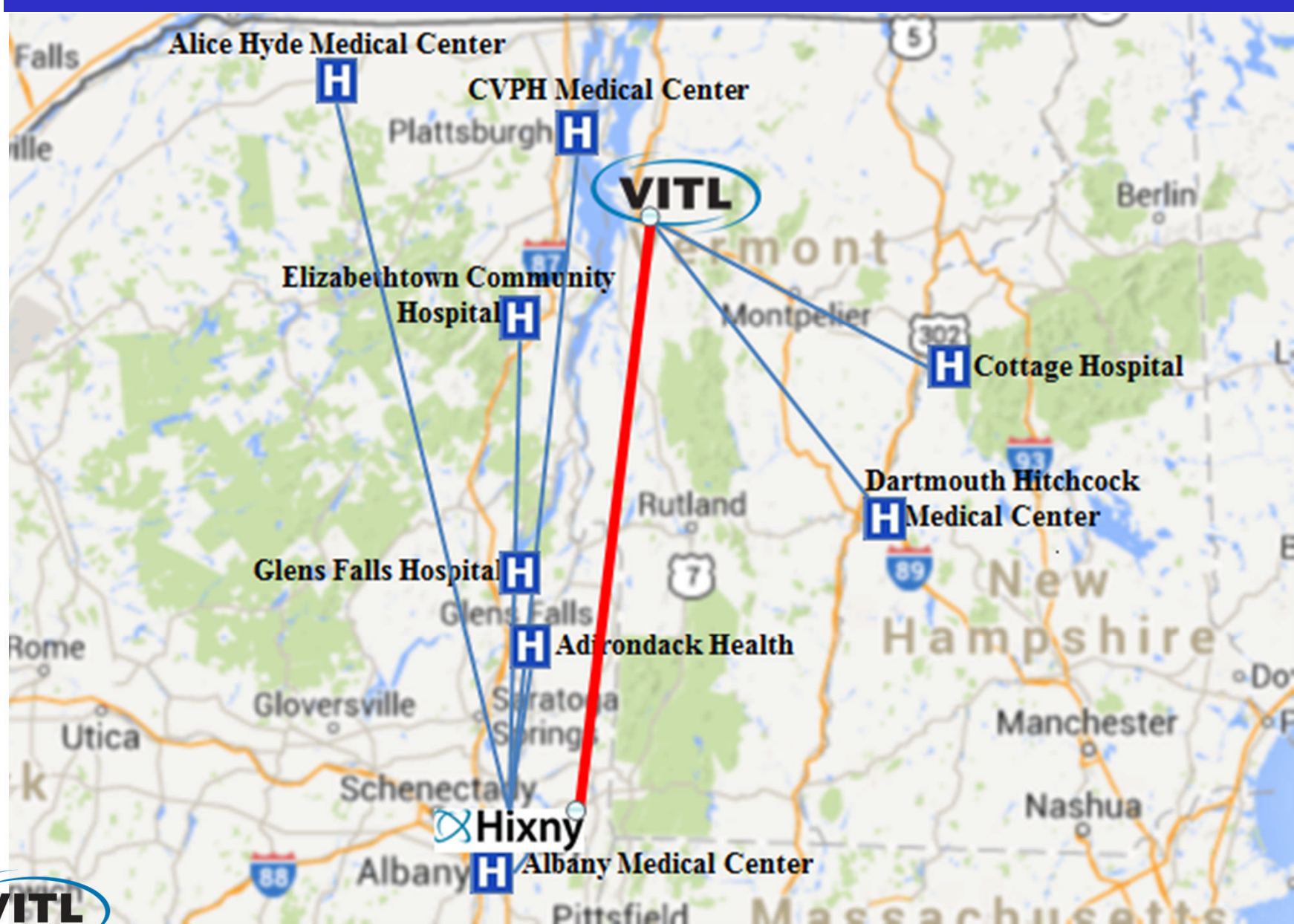
# Medical Imaging Network

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- VITL leading the effort to design and develop a state-wide imaging network:
  - View prior images through VITLAccess
  - Potentially reduce image archiving costs
  - Use of a clinical decision support tool
- Applied for a \$8.5m CMS Health Care Innovation Award Grant with FAHC, DHMC and lifeIMAGE: January 2014



# VITL X-State Connectivity



# Connectivity Criteria

- New Legislation – H.107: VITL, in consultation with health care providers and health care facilities, shall establish criteria for creating or maintaining connectivity to the State’s health information exchange network. VITL shall provide the criteria annually by March 1 to the Green Mountain Care Board established pursuant to chapter 220 of this title.
- Lantana Consulting Group Engaged
  - Assisted with developing the standards for health information interoperability over the past 15 years, including HL7's Clinical Document Architecture (CDA) and the HL7 Continuity of Care Document (CCD).
  - Clients have included: CDC; National Institute of Standards and Technology; RAND; National Quality Forum, National Cancer Institute
- Provider Interviews Underway





# **VITL Access Demo**







# Questions?

