

CONNECTICUT'S HEALTH-IT AGENDA

Minakshi Tikoo, Director of Business Intelligence & Shared Analytics and HHS HIT Coordinator
Connecticut Dept. of Social Services
May 2015

Overview

- Connecticut's Health Information Technology (HIT) Landscape
- Current HIT Projects
 - CMS Medicaid Electronic Health Record (EHR) Incentive Program
 - Department of Social Services (DSS) Direct Program
 - State Innovative Model (SIM)
- Proposed HIT Projects using Direct

American Recovery & Reinvestment Act

(February 2009)

- Also known as the stimulus package
- 1 of every \$5 went to Health IT
- \$2 billion for the Office of the National Coordinator
- Authorized \$27 billion in incentive payments through CMS over 10 years
- All depends on demonstrating “meaningful use” of certified EHRs

HITECH (Health Information Technology for Economic & Clinical Health Act)

- Goal of HITECH is to increase the use of Health IT to:
 - Improve quality, safety, and efficiency of health care while reducing disparities
 - Engaging patients and families
 - Improving care coordination
 - Ensuring adequate privacy and security protections for personal health information
 - Improving population and public health

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Connecticut's Current HIT Landscape

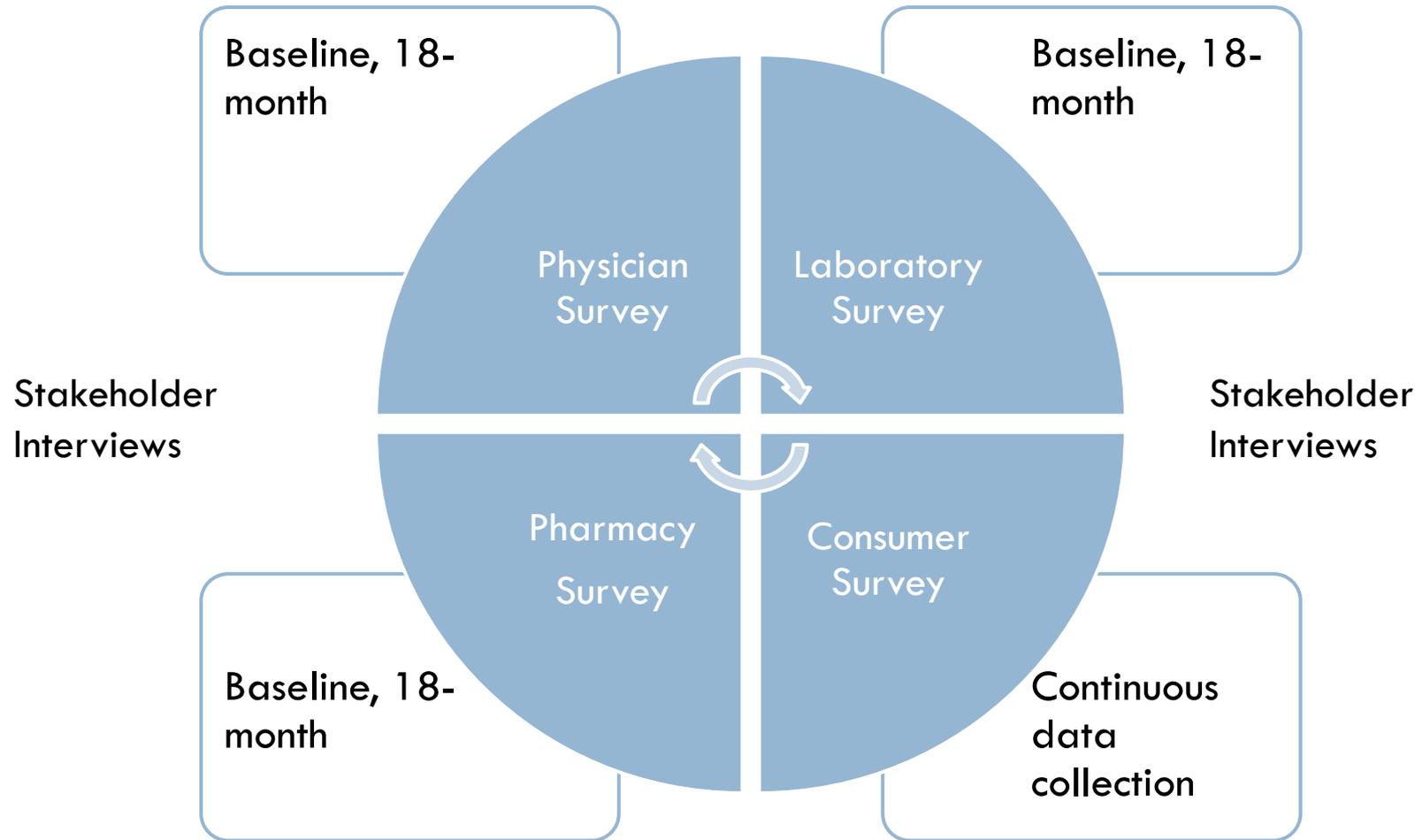
Connecticut's HIT Landscape

- **Public Act 10-117**, *"An Act Concerning Revisions to Public Health Related Statutes and the Establishment of the Health Information Technology Exchange of Connecticut," Sec. 82-90, 96 (codified at CSG §19a-750(c)(1))*
- The Health Information Technology Exchange of Connecticut (HITE-CT), a quasi-public agency, was sunset effective June 30, 2014 and the responsibilities for HIT were transferred to the Department of Social Services (DSS) via Bill 5597.

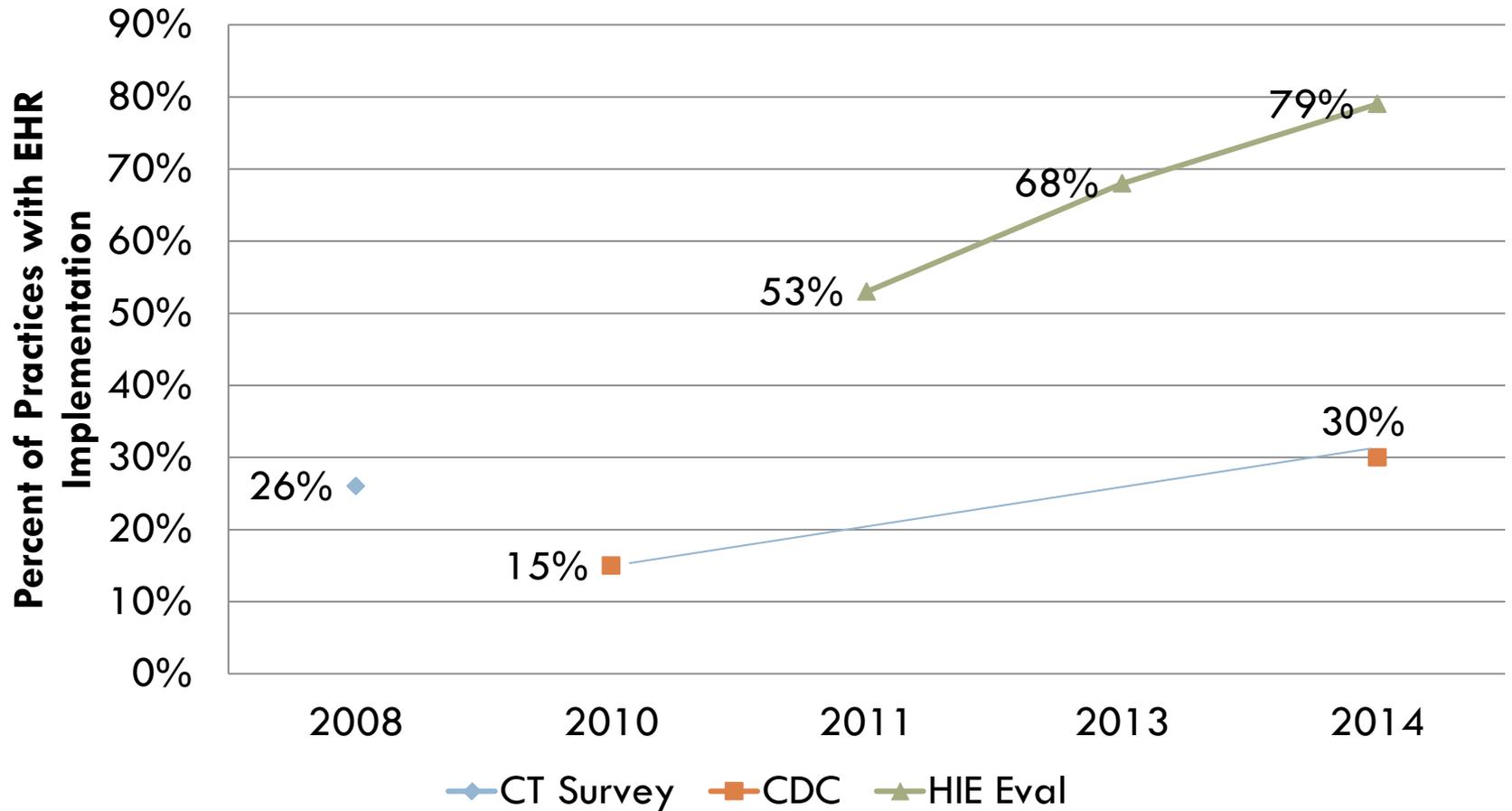
Current HIT Assets

- Baseline and follow-up HIT adoption data (2011-13)
- CMS/DSS Medicaid EHR Incentive Program
 - ▣ Direct Health Information Service Provider
 - ▣ Core and Menu Measures
 - ▣ eClinical Quality Measures (eCQMs)
- HIT Logic Model for the State of Connecticut
- Provider Directory
- Enterprise Master Patient Index
- Integrated Eligibility System
- All payers claims data (APCD)

A Mixed-Method Design for HIE Evaluation (2011-2013)



Change in EHR Adoption among Physicians 2008 to 2013



Environmental Scan

	2011		2013		2011		2013	
	Cohort 1 (N=616)		Cohort 2 (N=202)		Baseline (N=264)		Follow-Up (N=264)	
	N	%	N	%	N	%	N	%
EHR adoption								
Fully implemented	227	37.8	126	62.4	105	39.8	141	53.4
Implementation in process	111	18.0	23	11.4	34	12.9	39	14.8
Acquired but not implemented	36	5.8	12	5.9	11	4.2	6	2.3
Plan to acquire in next year	61	9.9	8	4.0	26	9.9	6	2.3
Plan to acquire in next 2 years	60	9.7	8	4.0	19	7.2	12	4.5
No plans to acquire	102	16.6	20	9.9	64	24.2	56	21.2
Missing	19	3.1	5	2.5	5	1.9	4	1.5
If you have purchased or are in the process of implementing an EHR system, within how many months do you expect to have completed implementation?								
	2011		2013		2011		2013	
	Cohort 1 (N=147)		Cohort 2 (N=35)		Baseline (N=45)		Follow-Up (N=45)	
	N	%	N	%	N	%	N	%
Within 6 months	53	36.0	11	31.4	17	37.8	11	24.4
Within 7-12 months	37	25.2	8	22.9	11	24.4	9	20.0
Not for a year or more	28	19.1	3	8.6	7	15.6	5	11.1
Missing	29	19.7	13	37.1	10	22.2	20	44.4

Tikoo M, Costello D. *Evaluating Connecticut's Health Information Technology Exchange: Physician Survey Report*. Farmington, CT: University of Connecticut Health Center; 2014.

EHR Adoption among Physicians

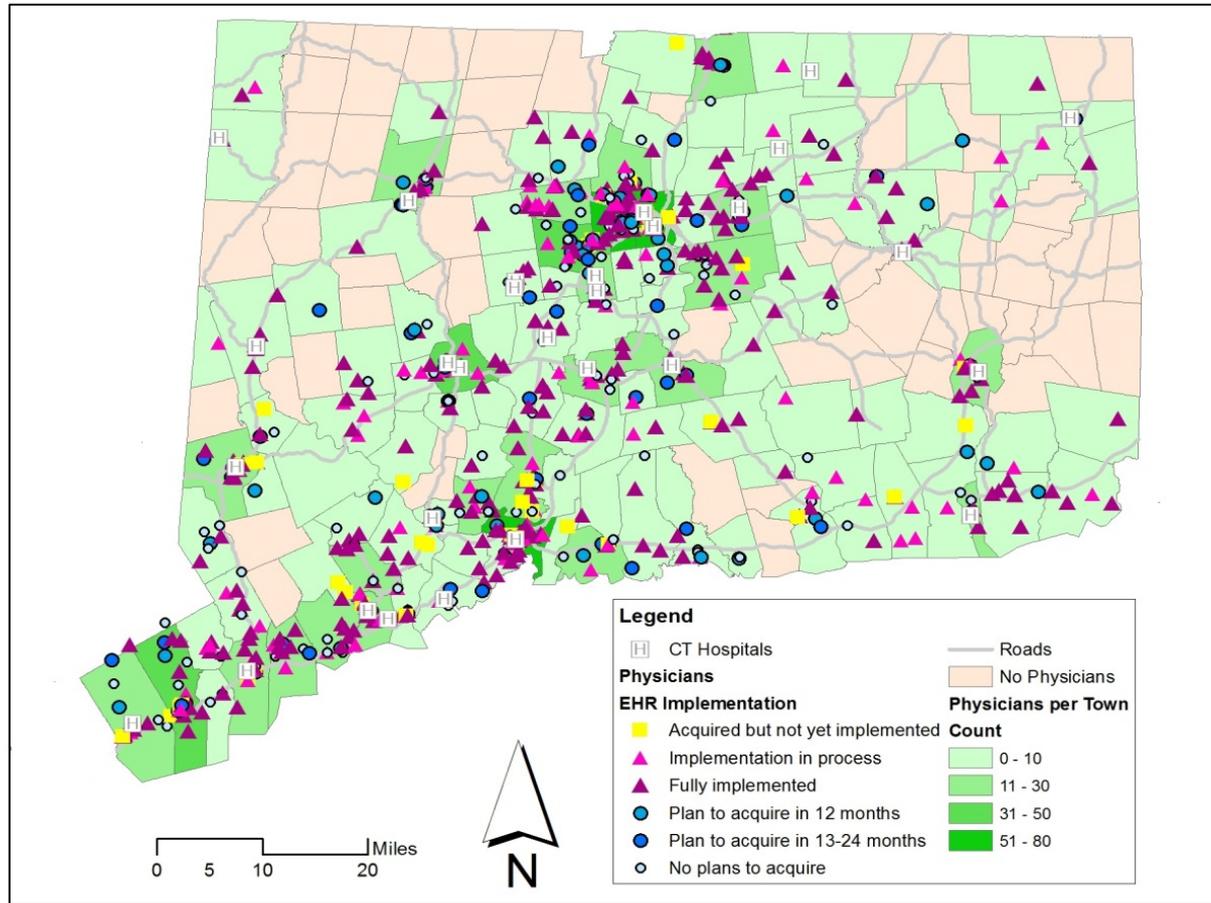
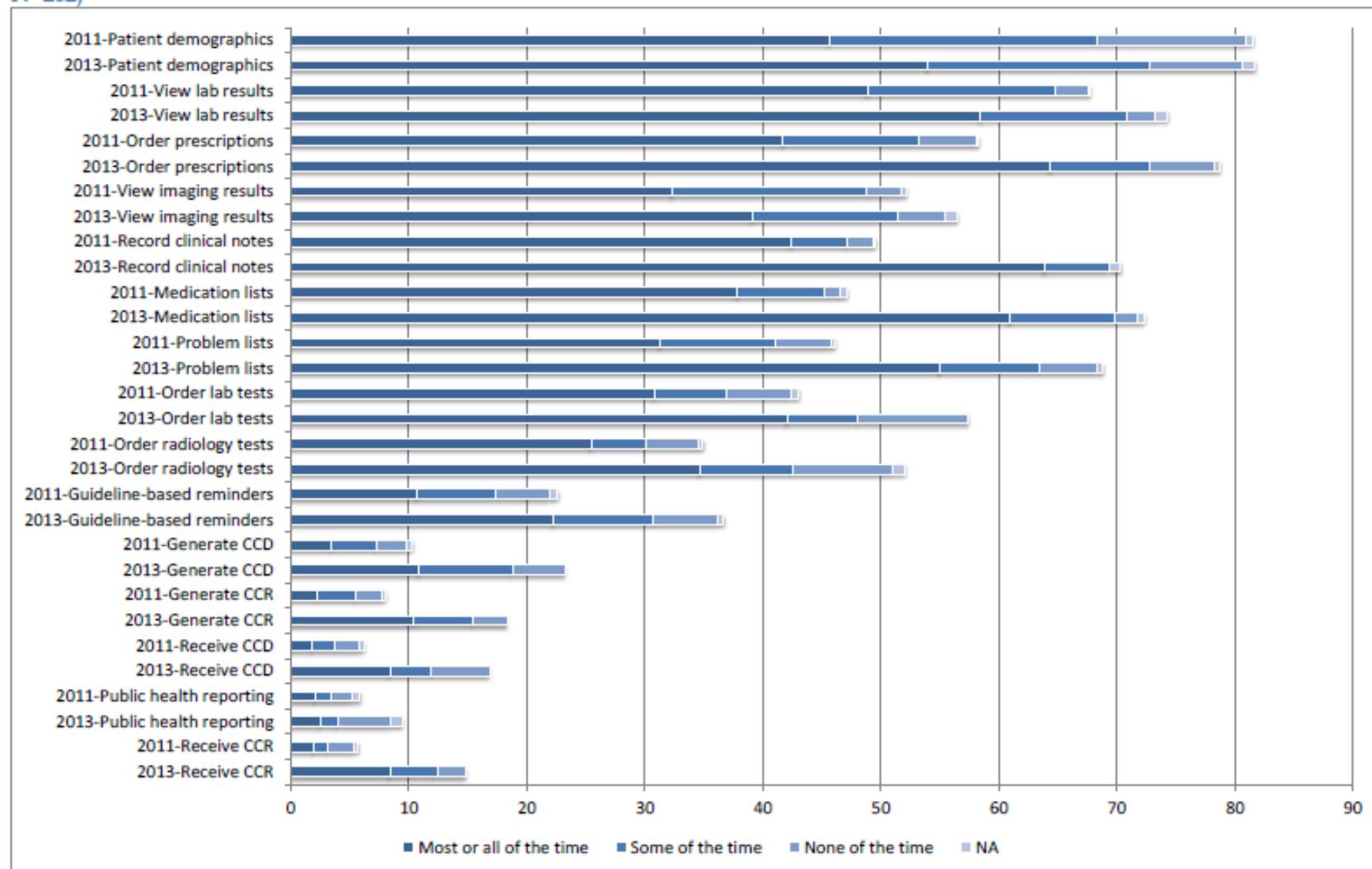
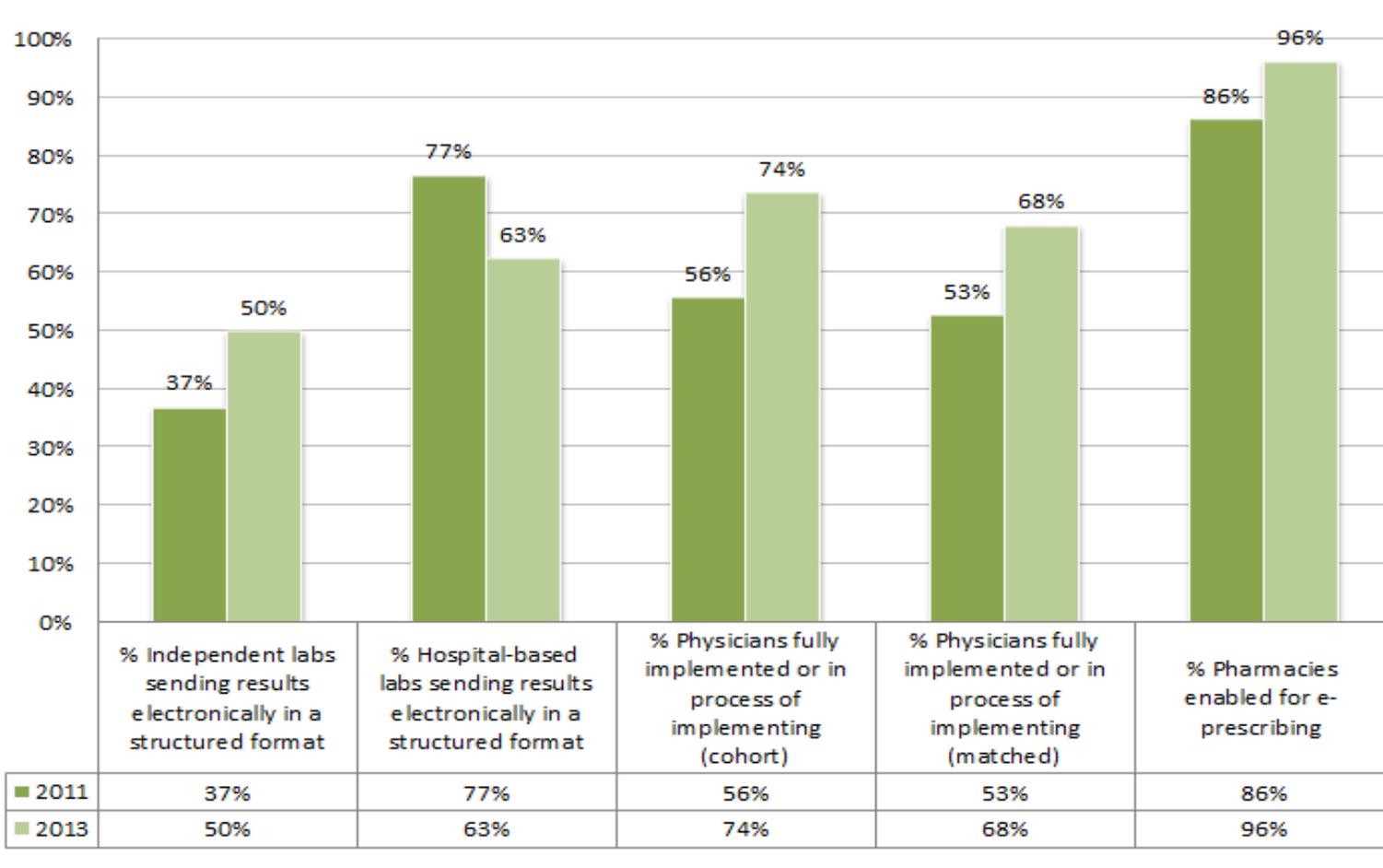


Figure 7. Use of each clinical function within physicians' current computer systems (2011 Cohort 1, N=616 and 2013 Cohort 2, N=202)



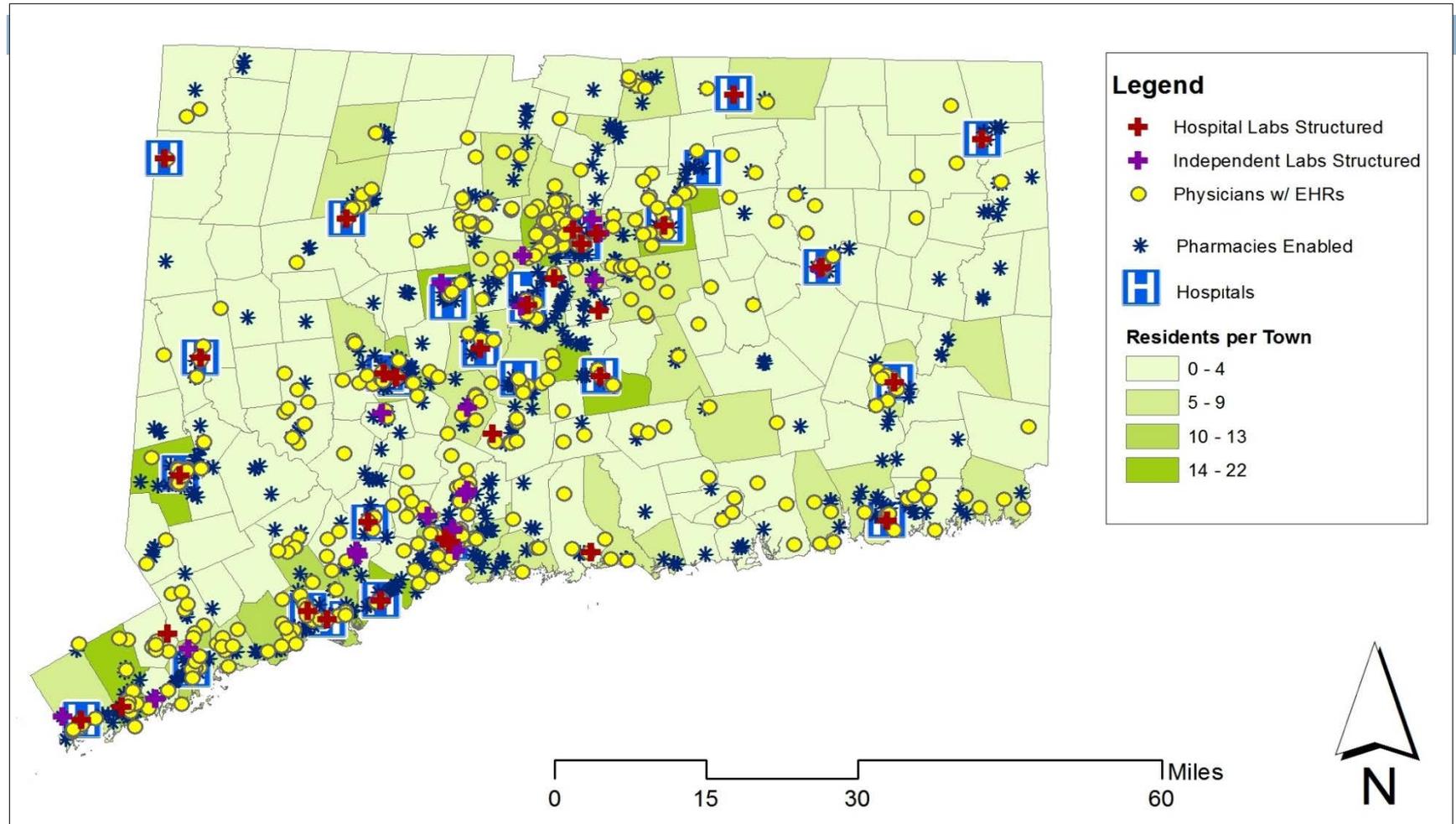
Tikoo M, Costello D. *Evaluating Connecticut's Health Information Technology Exchange: Physician Survey Report*. Farmington, CT: University of Connecticut Health Center; 2014.

Electronic Capabilities of Labs, Physicians, and Pharmacies



Tikoo M. *Evaluating Connecticut's Health Information Technology Exchange: Executive Summary*. Farmington, CT: University of Connecticut Health Center; 2014.

HIT Enabled



Tikoo M. *Evaluating Connecticut's Health Information Technology Exchange: Executive Summary.* Farmington, CT: University of Connecticut Health Center; 2014.

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Connecticut's EHR Incentive Program

EHR Incentive Programs (1/11-2/15)

State/Territory	Program Type	Unique EPs	Unique Hospitals
Connecticut	Medicaid	1,826	1
3.597 million	Medicare	3,955	1
	Medicaid/Medicare		27
		5,781	29
Massachusetts	Medicaid	5,609	2
6.745 million	Medicare	10,306	4
	Medicaid/Medicare		59
		15,915	65
Rhode Island	Medicaid	448	
1.055 million	Medicare	876	1
	Medicaid/Medicare		12
		1,324	13

http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/February2015_UniqueCountsbyProvidersbyStates.pdf

Medicare EHR Incentive Payments

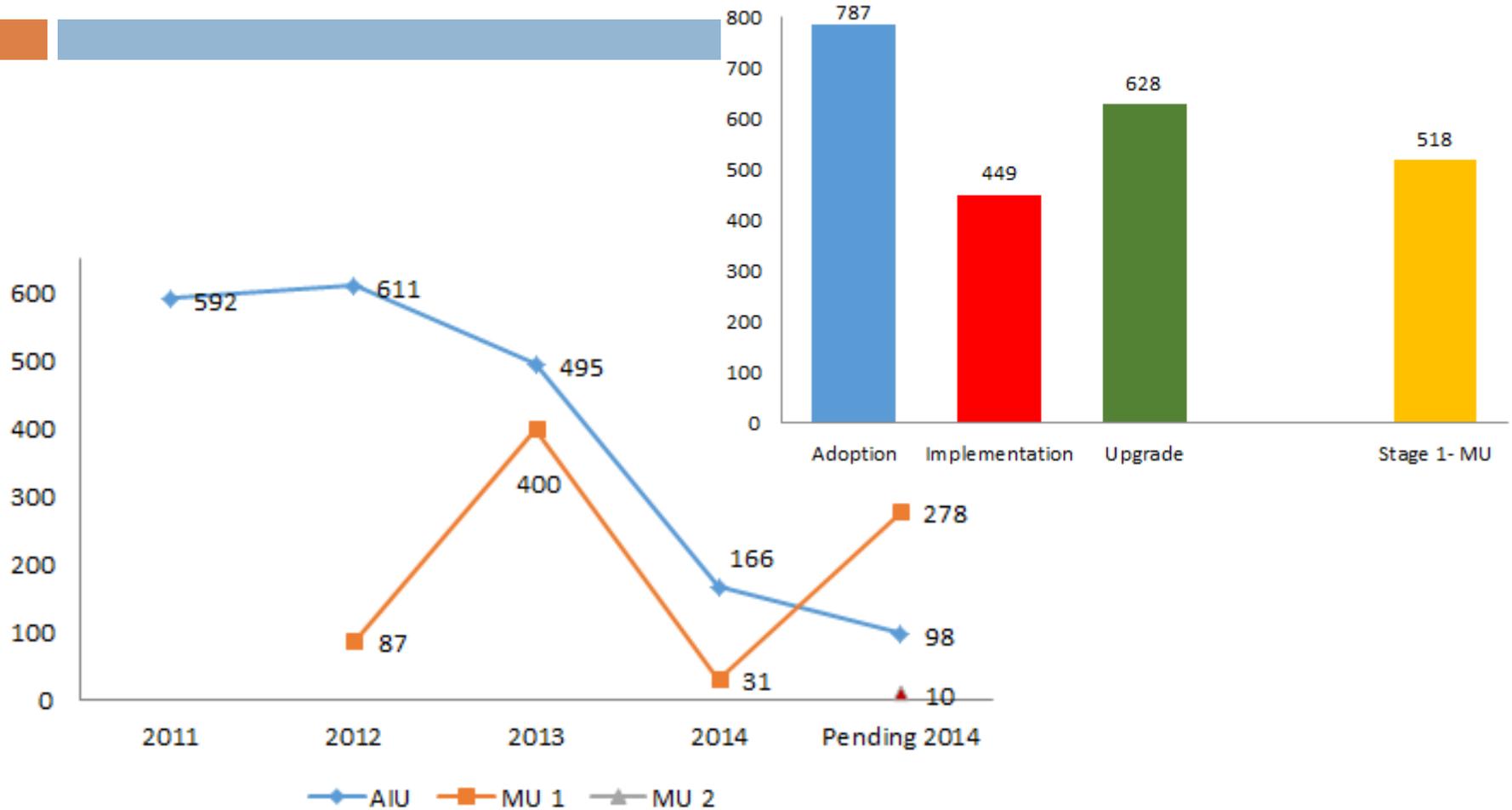
State / Territory	MEDICARE			
	Program Type	Provider Type	Count	Amount
Alabama	Medicare	EP	7,725	\$ 103,289,736.11
	Medicare	Hospital	7	\$ 10,624,043.26
	Medicare/Medicaid	Hospital	228	\$ 284,323,968.15
Alabama			7,960	\$ 398,237,747.52
Alaska	Medicare	EP	506	\$ 6,526,137.16
	Medicare	Hospital	1	\$ 328,495.88
	Medicare/Medicaid	Hospital	30	\$ 15,192,861.89
Alaska			537	\$ 22,047,494.93
Arizona	Medicare	EP	8,889	\$ 116,997,283.31
	Medicare	Hospital	1	\$ 1,050,694.48
	Medicare/Medicaid	Hospital	162	\$ 194,091,755.91
Arizona			9,052	\$ 312,139,733.70
Arkansas	Medicare	EP	4,062	\$ 53,695,557.38
	Medicare	Hospital	11	\$ 15,608,725.50
	Medicare/Medicaid	Hospital	159	\$ 168,924,474.87
Arkansas			4,232	\$ 238,228,757.75
California	Medicare	EP	42,205	\$ 540,755,507.60
	Medicare	Hospital	128	\$ 162,292,406.07
	Medicare/Medicaid	Hospital	615	\$ 739,540,518.84
California			42,948	\$ 1,442,588,432.51
Colorado	Medicare	EP	9,039	\$ 113,775,392.77
	Medicare	Hospital	14	\$ 13,873,816.02
	Medicare/Medicaid	Hospital	165	\$ 147,242,927.93
Colorado			9,218	\$ 274,892,136.72
Connecticut	Medicare	EP	7,629	\$ 99,929,995.70
	Medicare	Hospital	3	\$ 2,454,083.00
	Medicare/Medicaid	Hospital	73	\$ 125,916,865.45
Connecticut			7,705	\$ 228,300,944.15

Medicaid EHR Incentive Payments

MEDICAID								TOTAL	
Program Type	Provider Type	AIU Count	AIU Amount	MU Count	MU Amount	Total Count	Total Amount	Count	Amount
Medicaid	EP	1,692	\$ 35,600,850.00	735	\$ 6,256,011.00	2,427	\$ 41,856,861.00	10,152	\$ 145,146,597.11
Medicaid	Hospital	2	\$ 6,719,312.00	1	\$ 1,972,568.00	3	\$ 8,691,880.00	10	\$ 19,315,923.26
Medicare/Medicaid	Hospital	86	\$ 56,196,935.00	118	\$ 41,722,850.00	204	\$ 97,919,785.00	432	\$ 382,243,753.15
		1,780	\$ 98,517,097.00	854	\$ 49,951,429.00	2,634	\$ 148,468,526.00	10,594	\$ 546,706,273.52
Medicaid	EP	665	\$ 14,088,752.00	398	\$ 3,833,501.00	1,063	\$ 17,922,253.00	1,569	\$ 24,448,390.16
Medicaid	Hospital	0	\$ -	3	\$ 1,359,241.00	3	\$ 1,359,241.00	4	\$ 1,687,736.88
Medicare/Medicaid	Hospital	21	\$ 13,187,800.00	21	\$ 8,640,298.00	42	\$ 21,828,098.00	72	\$ 37,020,959.89
		686	\$ 27,276,552.00	422	\$ 13,833,040.00	1,108	\$ 41,109,592.00	1,645	\$ 63,157,086.93
Medicaid	EP	2,883	\$ 61,030,011.00	798	\$ 6,835,421.00	3,681	\$ 67,865,432.00	12,570	\$ 184,862,715.31
Medicaid	Hospital	2	\$ 4,582,604.98	3	\$ 4,376,927.34	5	\$ 8,959,532.32	6	\$ 10,010,226.80
Medicare/Medicaid	Hospital	68	\$ 74,046,703.03	75	\$ 60,809,495.65	143	\$ 134,856,198.68	305	\$ 328,947,954.59
		2,953	\$ 139,659,319.01	876	\$ 72,021,843.99	3,829	\$ 211,681,163.00	12,881	\$ 523,820,896.70
Medicaid	EP	1,258	\$ 26,605,006.00	864	\$ 7,674,088.00	2,122	\$ 34,279,094.00	6,184	\$ 87,974,651.38
Medicaid	Hospital	2	\$ 2,886,695.67	1	\$ 1,235,658.26	3	\$ 4,122,353.93	14	\$ 19,731,079.43
Medicare/Medicaid	Hospital	47	\$ 15,278,858.84	107	\$ 26,407,990.91	154	\$ 41,686,849.75	313	\$ 210,611,324.62
		1,307	\$ 44,770,560.51	972	\$ 35,317,737.17	2,279	\$ 80,088,297.68	6,511	\$ 318,317,055.43
Medicaid	EP	15,098	\$ 319,316,712.92	6,386	\$ 56,197,750.26	21,484	\$ 375,514,463.18	63,689	\$ 916,269,970.78
Medicaid	Hospital	13	\$ 29,718,469.04	11	\$ 18,694,384.54	24	\$ 48,412,853.58	152	\$ 210,705,259.65
Medicare/Medicaid	Hospital	239	\$ 346,373,563.31	377	\$ 236,955,695.78	616	\$ 583,329,259.09	1,231	\$ 1,322,869,777.93
		15,350	\$ 695,408,745.27	6,774	\$ 311,847,830.58	22,124	\$ 1,007,256,575.85	65,072	\$ 2,449,845,008.36
Medicaid	EP	2,317	\$ 48,761,689.00	859	\$ 7,328,424.00	3,176	\$ 56,090,113.00	12,215	\$ 169,865,505.77
Medicaid	Hospital	1	\$ 2,616,739.00	1	\$ 2,093,391.00	2	\$ 4,710,130.00	16	\$ 18,583,946.02
Medicare/Medicaid	Hospital	45	\$ 23,092,050.00	62	\$ 33,485,727.00	107	\$ 56,577,777.00	272	\$ 203,820,704.93
		2,363	\$ 74,470,478.00	922	\$ 42,907,542.00	3,265	\$ 117,378,020.00	12,503	\$ 392,270,156.72
Medicaid	EP	1,833	\$ 38,377,525.00	516	\$ 4,405,851.00	2,349	\$ 42,783,376.00	9,978	\$ 142,713,371.70
Medicaid	Hospital	1	\$ 2,129,616.96	0	\$ -	1	\$ 2,129,616.96	4	\$ 4,583,699.96
Medicare/Medicaid	Hospital	18	\$ 15,184,969.77	42	\$ 19,260,550.46	60	\$ 34,445,520.23	133	\$ 160,362,385.68
		1,852	\$ 55,692,111.73	558	\$ 23,666,401.46	2,410	\$ 79,358,513.19	10,115	\$ 307,659,457.34

Eligible Professionals Participating in the EHR Incentive Program

(Data 4/9/2015)

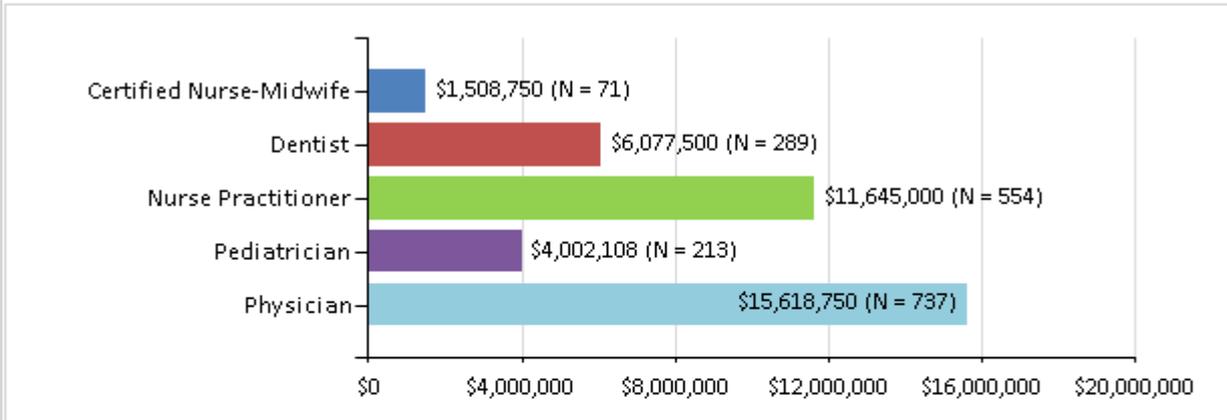


Medicaid EHR Incentive Program: Cumulative Payments by Provider Type

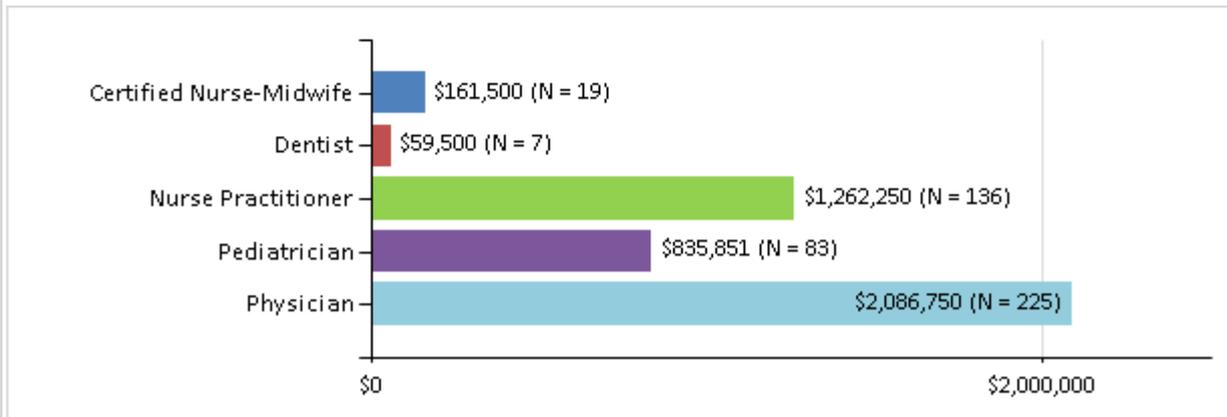
Source: 4/9/2015 MAPIR Super Extract

Report Generated 4/10/2015

AIU Payments



Meaningful Use Payments



Connecticut's Direct Program

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To accomplish secure exchange of messages containing Health Information , ONC started the Direct project in 2010. The aim of the direct project was to specify ...

" a simple, secure, scalable, standards-based way for participants to send authenticated, encrypted health information directly to known, trusted recipients over the (public) internet"

It is HIPAA compliant and you do not need an electronic health record to be able to use Direct.

Connecticut's Direct Web Portal



Email | Direct Search

Sign In

Providing you with the ability to safely transfer
personal health information with confidence.



Welcome Back

Secure Email: @CTProviderDirect.org

Password:

[Sign In](#)

[Reset Password](#)

Contact Us

> [EHR Website](#)

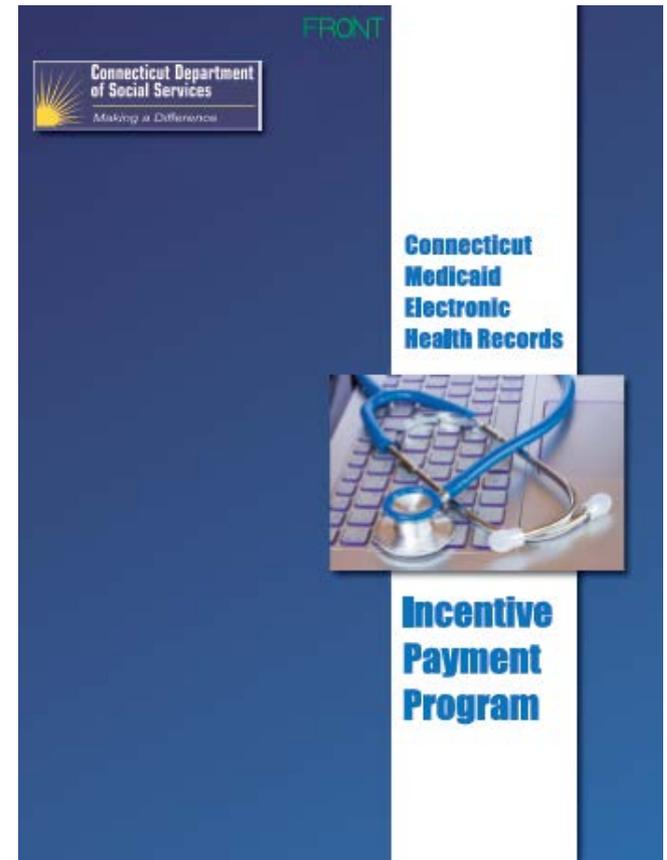
> [Important Messages](#)

Registering for Direct

- Email provisioning details to program contact.
- Within one business day, you will receive an Email from the CTPProviderDIRECT administrator, registrar@CTProviderDIRECT.org, with log on instructions to the Web Portal, including a temporary password.
- Log onto <https://ctproviderdirect.org> to complete your registration.
 - Accept terms of use
 - Change password
- Start using DIRECT messaging to optimize transitions of care and improve care coordination.

Direct in Connecticut

- Partner with whom you exchange a large volume of patient information
- How many partners are using a certified EHR?
- How many partners do not use a certified EHR?
- Which workflow do you want to use Direct for?
- <https://ctproviderdirect.org/Portal/?ReturnUrl=%2fPortal%2fEmail%2fSSO>



The Project – Secure Messaging

- **Goal** – coordination of care
- **Replaces** – unsecured faxing and emailing information
- **How does it work** – through a portal or through the tool kit integration with EHR for exchanging any-type of patient data with clinicians, care-team, patients...
- **Security** – two factor NIST Level 3 Assurance
- **What does this offer** – a free one-year subscription with free referral accounts
- **Standards** – uses Direct Framework and meets Direct specification
- **Comparative Cost** – RI \$10.00/PM/PM cost; DE \$15.00/PM/PM

Direct – XX@CTProviderDirect.org

- Through its EHR incentive Program DSS is offering Direct mailboxes to eligible professionals and additional referral providers of their choice at no cost.

Launched program
April 23, 2014

First Direct mail box assigned
May 1, 2014

First Direct messages sent¹⁰
June 26, 2014

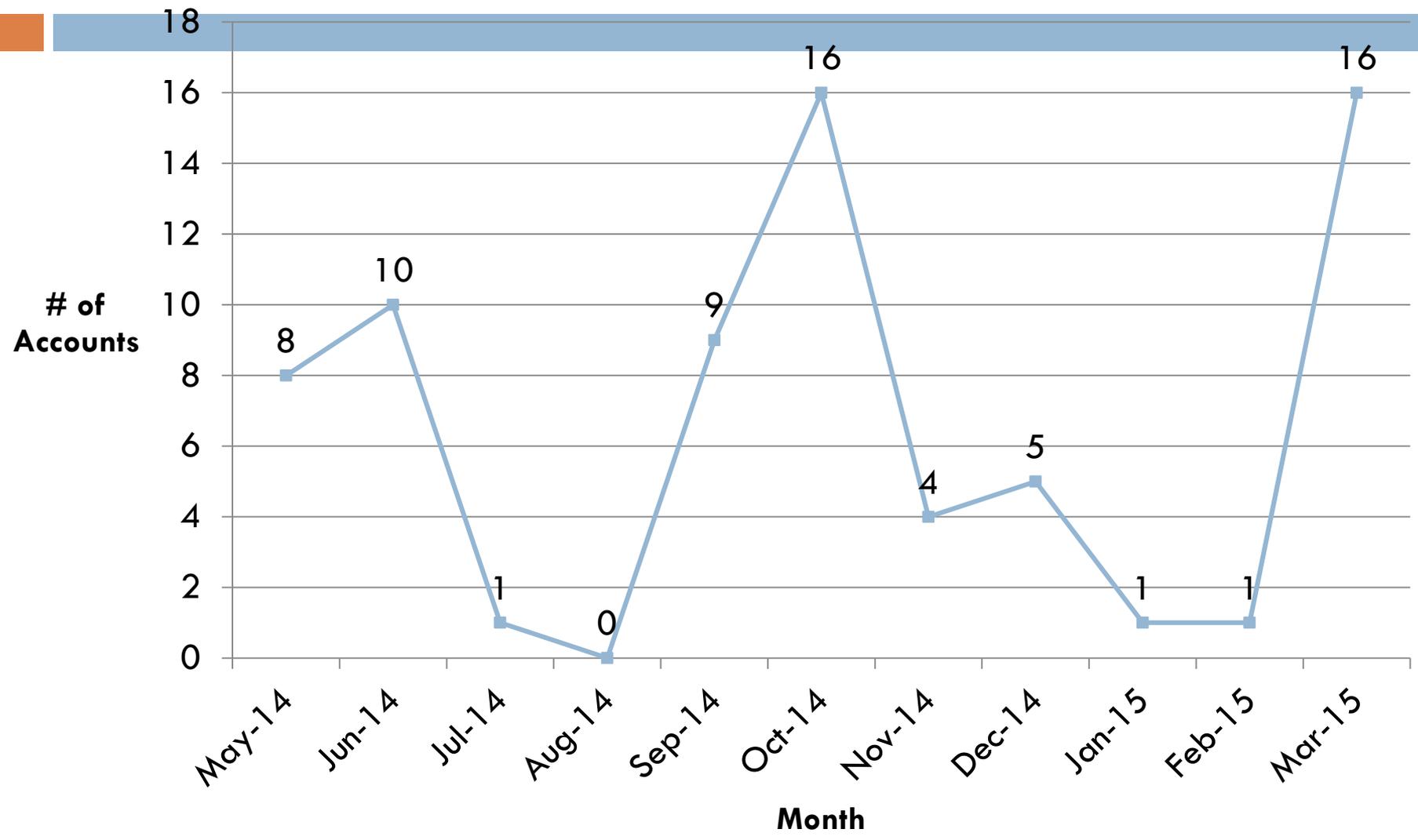
As of March 31, 2015

of Direct Accounts = 71
of EPs = 50
of referrals = 21
of Organizations = 48
of messages received = 524
of messages sent = 110
of HSPs = 4

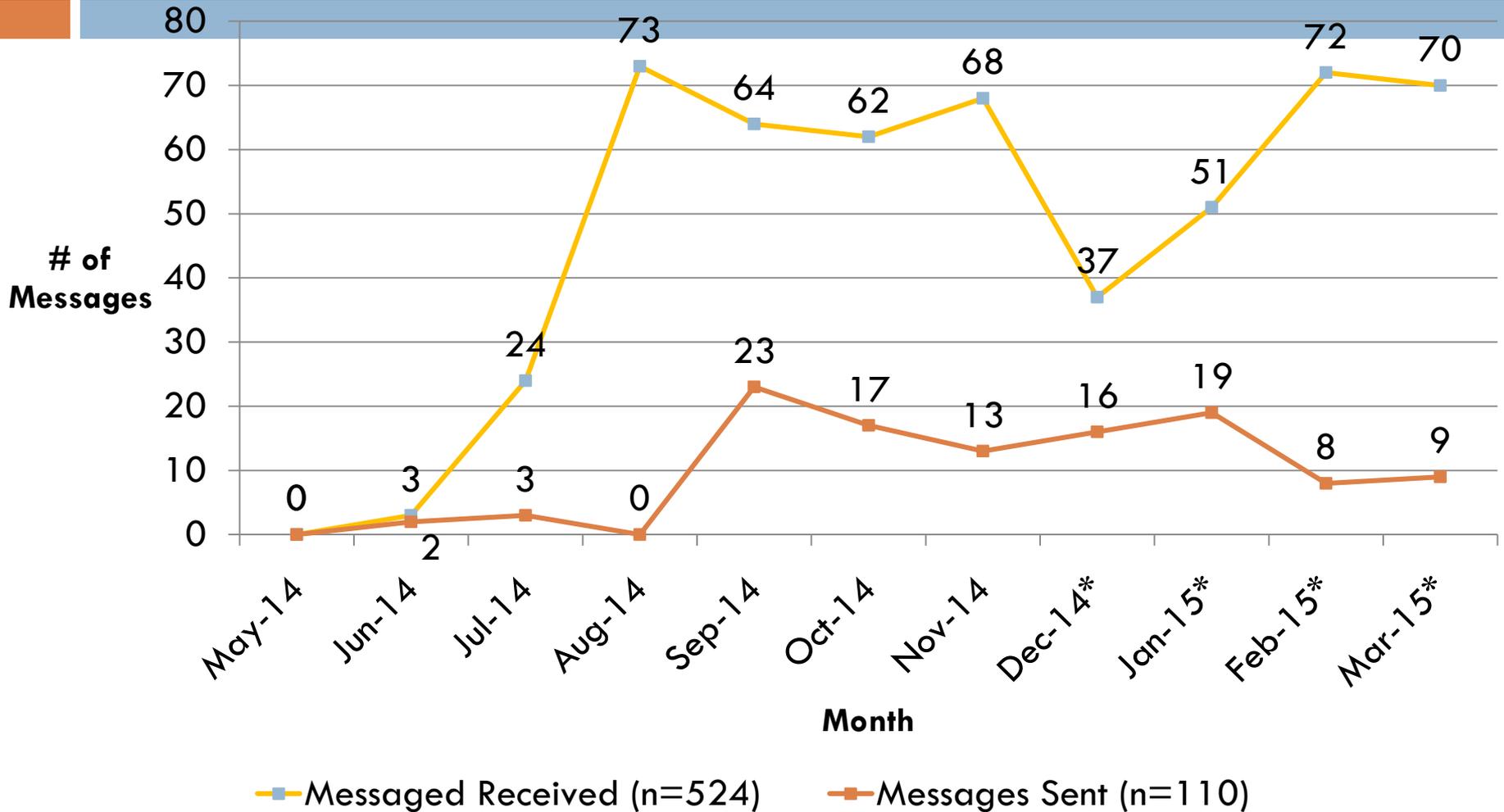


Accounts Registered on CTPProviderDirect

(ends 3/31/15 (n=71))



Direct Messages Sent and Received on CTPProviderDirect (ends 3/31/15)



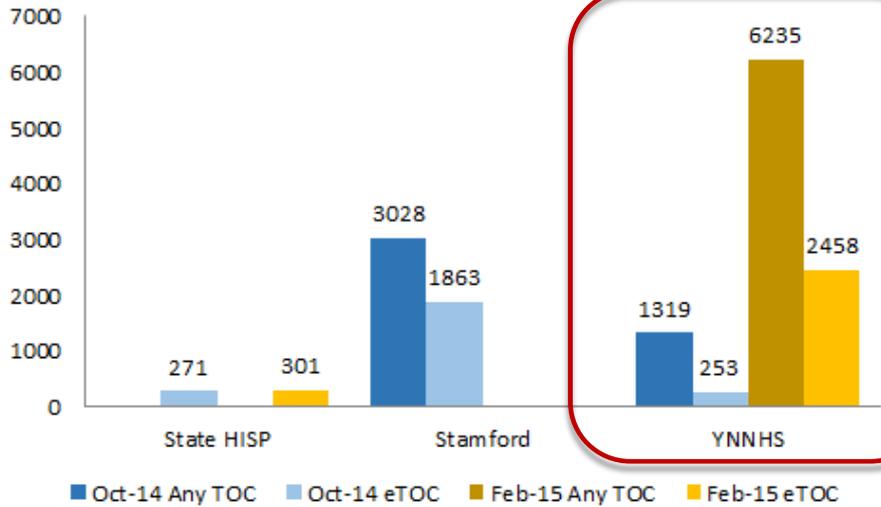
*SMTP Ports were enabled on December 17th. Total does not include messages sent via SMTP. SMTP volumes are scheduled to be included in sent messages starting May 1st

Direct Accounts Registered

(N=71, 3/31/2015)

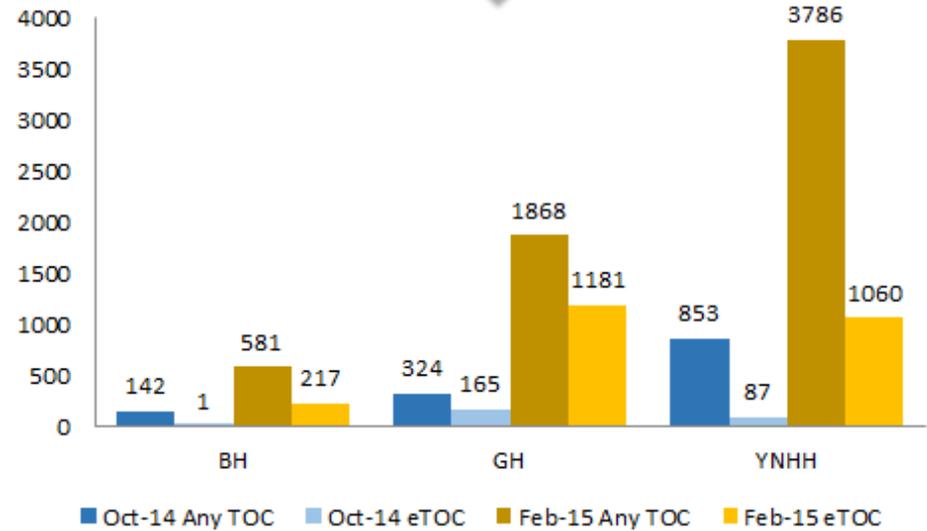
	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Total
EPs												
Physician	4	3	0	0	1	2	1	2	0	1	1	15
Pediatrician	1	1	0	0	0	6	0	0	0	0	0	8
Dentist	1	0	0	0	5	2	2	0	0	0	0	10
APRN	2	1	0	0	1	2	0	1	0	0	10	17
Total EP	8	5	0	0	7	12	3	3	0	1	11	50
Referrals												
APRN	0	0	0	0	0	0	0	0	0	0	5	5
LADC	0	0	0	0	0	0	0	0	1	0	0	1
Home Health	0	0	1	0	0	0	0	1	0	0	0	2
Dentist	0	0	0	0	2	0	1	1	0	0	0	4
Nursing Home	0	5	0	0	0	4	0	0	0	0	0	9
Total Referral	0	5	1	0	2	4	1	2	1	0	5	21
Total Accounts Registered	8	10	1	0	9	16	4	5	1	1	16	71
Testing	1	0	0	0	1	0	0	2	0	0	1	5

Direct Use in Connecticut



Yale New Haven Health System (YNNHS) is comprised of

- Bridgeport Hospital
- Greenwich Hospital
- Yale New Haven hospital



Other Use cases for Direct

- Disease Registries
- eCQMs reporting using QRDA I or III
- Alert/Notification Engine
- Communicating orders such as Durable Medical Equipment (DME)
- Personal Health Record

Relevant Meaningful Use (MU) Measures

Objective - Provide patients with an electronic copy/access to their health information (including diagnostic test results, problem lists, medication lists, medication allergies)

- Stage 1 - More than 50% of all patients of the EP who request an electronic copy of their health information are provided it within 3 business days
- Stage 2 –
 - More than 50% of all unique patients see by the EP during the EHR reporting period are provided timely (within 4 business days) online access to their health information.
 - More than 5% of all unique patients see by the EP during the EHR reporting period view, download, or transmit to a third party their health information.

<http://www.cms.gov/Regulations-andGuidance/Legislation/EHRIncentivePrograms/Downloads/Stage1vsStage2CompTablesforEP.pdf>

CORE AND MENU MEASURES REPORT

MAPIR Extract Date: 4/9/2015

EHR Phase: Meaningful Use-1

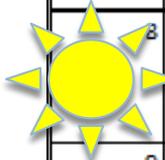
Percentage of Core and Menu Measures by Eligible Providers										No. Eligible Professionals: 516
Core	Description	Exclude	Data Qual	Comp/Met	Threshold%	Min%	Max%	Mean %	Std Dev%	
1	Use computerized provider order entry (CPOE) for medication orders directly entered by any licensed healthcare professional who can enter orders into the medical record per state, local, and professional guidelines.	67	0	449	30.00%	34.21%	100.00%	88.66%	12.43%	
2	Implement drug-drug and drug-allergy interaction checks.	0	0	516						
3	Maintain an up-to-date problem list of current and active diagnoses.	0	0	516	80.00%	80.07%	100.00%	97.52%	4.40%	
4	Generate and transmit permissible prescriptions electronically (eRx).	81	6	429	40.00%	40.43%	100.00%	89.25%	12.19%	
5	Maintain active medication list.	0	0	516	80.00%	80.56%	100.00%	96.19%	4.06%	
6	Maintain active medication allergy list.	0	0	516	80.00%	80.85%	100.00%	96.64%	4.24%	
7	Record all of the following demographics: (A) Preferred language; (B) Gender; (C) Race; (D) Ethnicity; (E) Date of birth	0	0	516	50.00%	50.77%	100.00%	93.40%	9.55%	
8	Record and chart changes in the following vital signs: (A) Height; (B) Weight; (C) Blood pressure; (D) Calculate and display body mass index (BMI); (E) Plot and display growth charts for children 2-20years, including BMI	18	0	496	50.00%	47.45%	100.00%	89.04%	12.08%	
9	Record smoking status for patients 13 years old or older.	4	0	512	50.00%	0.00%	100.00%	88.78%	13.40%	
10	Report ambulatory clinical quality measures to CMS.	0	429	87						
11	Implement one clinical decision support rule relevant to specialty or high clinical priority along with the ability to track compliance with that rule.	0	0	516						
12	Provide patients with an electronic copy of their health information (including diagnostic test results, problem list, medication lists, medication allergies) upon request.	350	0	133	50.00%	0.00%	100.00%	94.09%	12.41%	
13	Provide clinical summaries for patients for each office visit.	1	0	515	50.00%	0.00%	100.00%	81.18%	16.53%	
14	Capability to exchange key clinical information (for example, problem list, medication list, medication allergies, and diagnostic test results), among providers of care and patient authorized entities electronically.	0	429	87						
15	Protect electronic health information created or maintained by the certified EHR technology through the implementation of appropriate technical capabilities.	0	0	516						
Percentage of Core and Menu Measures by Eligible Providers										No. Eligible Professionals: 516

Dashboard



Dashboard

Percentage of Core and Menu Measures by Eligible Providers									No. Eligible Professionals: 516
Menu	Description	Exclude	Data Qual	Comp/Met	Threshold%	Min%	Max%	Mean %	Std Dev%
1	Implement drug formulary checks.	14	122	380					
2	Incorporate clinical lab test results into EHR as structured data.	8	114	394	40.00%	0.00%	100.00%	88.12%	16.52%
3	Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, research, or outreach.	0	107	409					
4	Send reminders to patients per patient preference for preventive/follow-up care.	18	392	106	20.00%	15.51%	100.00%	81.43%	23.84%
5	Provide patients with timely electronic access to their health information (including lab results, problem list, medication lists, and allergies) within 4 business days of the information being available to the EP.	17	378	121	10.00%	0.08%	100.00%	82.10%	24.19%
6	Use certified EHR technology to identify patient-specific education resources and provide those resources to the patient if appropriate.	0	176	340	10.00%	0.00%	100.00%	60.08%	27.98%
7	The EP who receives a patient from another setting of care or provider of care or believes an encounter is relevant should perform medication reconciliation.	22	241	253	50.00%	50.36%	100.00%	86.48%	14.29%
8	The EP who transitions their patient to another setting of care or provider of care or refers their patient to another provider of care should provide summary care record for each transition of care or referral.	23	376	117	50.00%	64.71%	100.00%	91.57%	9.81%
9	Capability to submit electronic data to immunization registries or immunization information systems and actual submission according to applicable law and practice.	416	49	8					
10	Capability to submit electronic syndromic surveillance data to public health agencies and actual submission according to applicable law and practice.	86	427	2					



Core and Alternate Core CQMs

<u>NQF</u>	<u>Measure</u>	<u>CQM Type</u>
0013	Hypertension: Blood Pressure Measurement	Core
0028	Preventive Care and Screening Measure Pair: a) Tobacco Use Assessment; b) Tobacco Cessation Intervention	Core
0421	Adult Weight Screening and Follow-Up	Core
0024	Weight Assessment and Counseling for Children and Adolescents	Alternate Core
0038	Childhood Immunization Status	Alternate Core
0041	Preventive Care and Screening : Influenza Immunization for Patients >= 50 Years Old	Alternate Core

N = 456 Eligible Professionals

Eligible Providers Completing Individual CQMs

<u>NQF</u>	<u>Measure</u>	<u>EPs</u>	<u>Percent</u>
<u>Core</u>			
0028	Preventive Care and Screening Measure Pair: a) Tobacco Use Assessment; b) Tobacco Cessation Intervention	367	80.5%
0421	Adult Weight Screening and Follow-Up	321	70.4%
0013	Hypertension: Blood Pressure Measurement	197	43.2%
<u>Alternate Core</u>			
0024	Weight Assessment and Counseling for Children and Adolescents	223	48.9%
0038	Childhood Immunization Status	140	30.7%
0041	Preventive Care and Screening : Influenza Immunization for Patients >= 50 Years Old	63	13.8%
<u>Additional</u>			
0036	Use of Appropriate Medications for Asthma	112	24.6%
0002	Appropriate Testing for Children with Pharyngitis	108	23.7%
0061	Diabetes: Blood Pressure Management	107	23.5%
0027	Smoking and Tobacco Use Cessation, Medical Assistance	91	20%
0059	Diabetes: HbA1c Poor Control	86	18.9%
0031	Breast Cancer Screening	82	18%
0032	Cervical Cancer Screening	79	17.3%
0018	Controlling High Blood Pressure	77	16.9%
0033	Chlamydia Screening for Women	71	15.6%

Where Are We Today With Exchanging Health Information?

- Change in HIE legislation
 - The Health Information Technology Exchange of Connecticut (HITE-CT), a quasi-public agency, was created by the 2010 Connecticut General Assembly, was sunset effective June 30, 2014, and the responsibilities for Health Information Technology (HIT) and Health Information Exchange (HIE) were transferred to the Department of Social Services (DSS) via Public Act 14-217
 - Technology Assets
 - *A standards based Health Provider Directory*
 - *Enterprise Master Patient Index*
 - *HISP for Direct Messaging (DM)*

Connecticut's HealthIT Logic Model

