

Connected Healthcare – A View of the New Reality

Presented to

Building a Bridge to Better Health Coalition

August 22, 2013

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East Tennessee
Health Information Network

...working toward **CONNECTED HEALTHCARE**
to **reduce costs & improve patient outcomes**

Who is etHIN?



East Tennessee
Health Information Network

East Tennessee Health Information Network (etHIN) is a Regional Health Information Organization (RHIO) providing health information exchange (HIE) tools and technology services within its primary 17-county Community of Care.

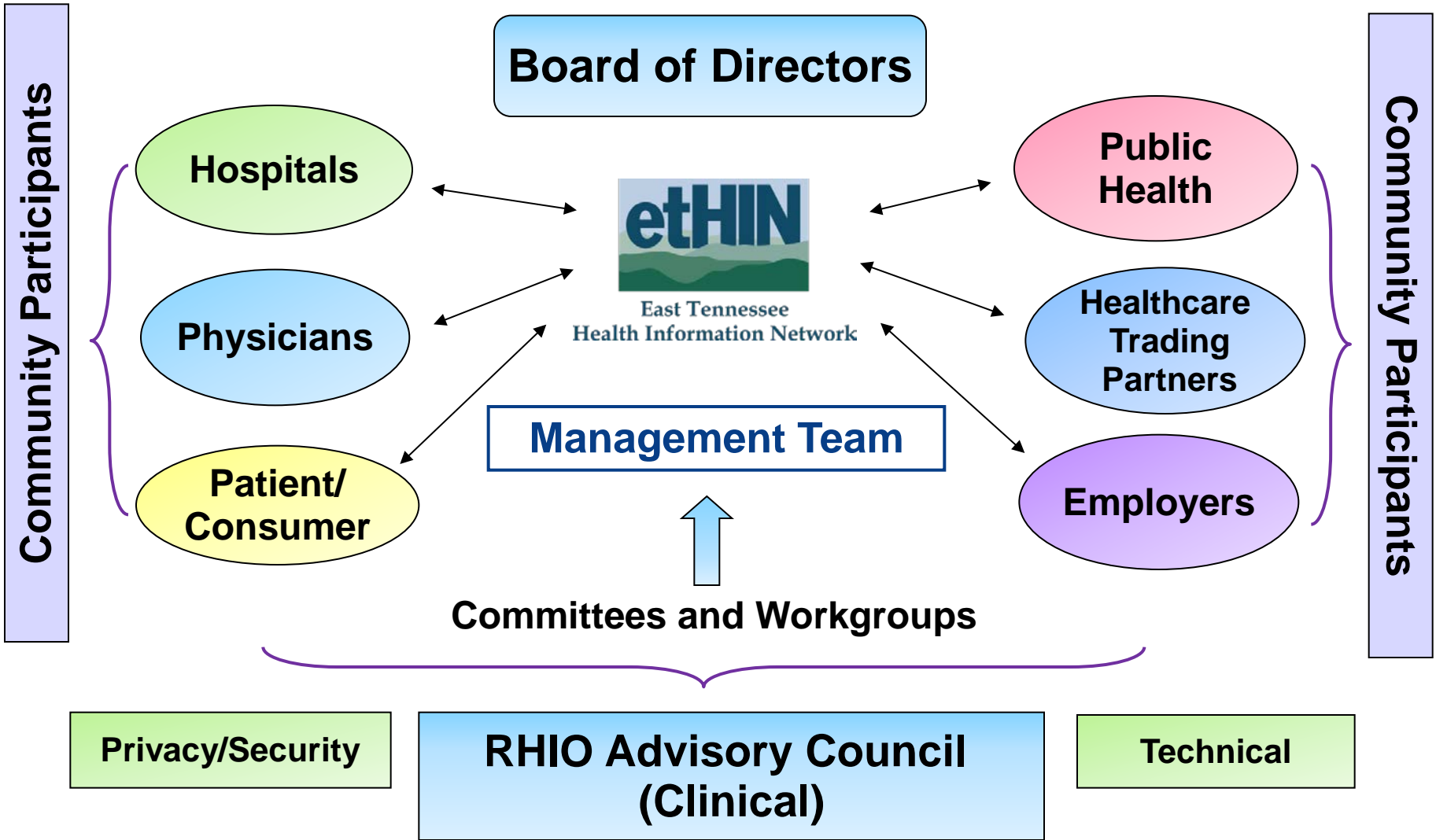
etHIN is a patient-centric community HIE. etHIN is a 501c3 non-profit organization with a sustainability plan and fee for service business model.



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etHIN's Governance



The etHIN Targeted “Community of Care”



17 Counties

**Over 1.2 million
Patients**

2,500+ Physicians

11 Hospital Systems

More than 4,500 Beds



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A Look at etHIN's Region, Statistically

etHIN Region County Statistics (17 of 95 Tennessee counties)

Health Outcomes

County Ranking	2012	vs.	2009
Anderson	44		36
Blount	4		5
Campbell	93		82
Claiborne	78		72
Cocke	85		88
Grainger	32		30
Hamblen	31		29
Jefferson	60		27
Knox	10		9
Loudon	16		25
McMinn	55		52
Monroe	36		28
Morgan	56		50
Roane	45		32
Scott	57		78
Sevier	28		23
Union	69		71

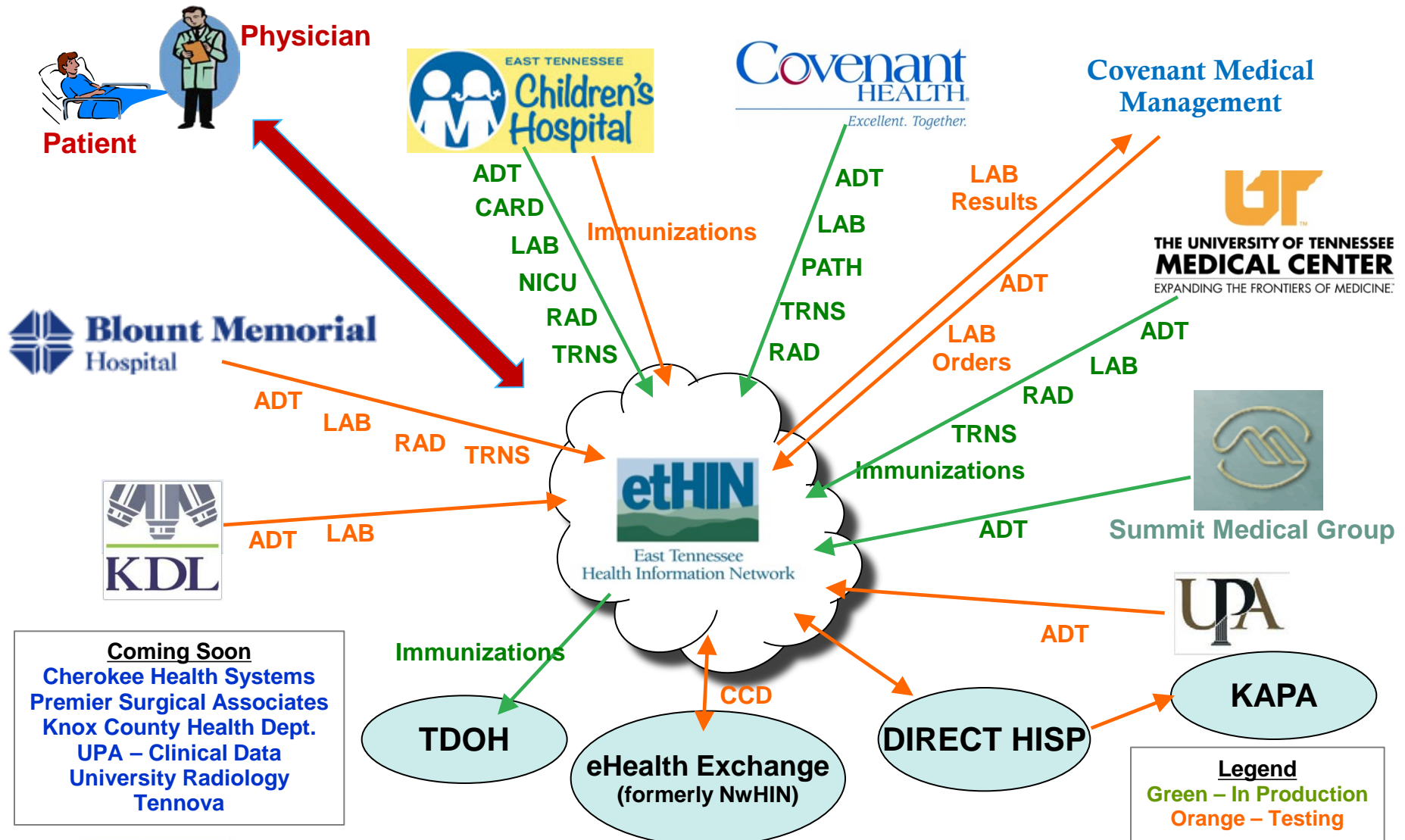
www.countyhealthrankings.org/tennessee

1 st Quartile – 18%		2 nd Quartile – 29%	
County	Rank	County	Rank
Blount	4	Sevier	28
Knox	10	Grainger	32
Loudon	16	Monroe	36
		Anderson	44
		Roane	45
3 rd Quartile – 35%		4 th Quartile – 18%	
County	Rank	County	Rank
McMinn	55	Claiborne	78
Morgan	56	Cocke	85
Scott	57	Campbell	93
Jefferson	60		
Hamblen	61		
Union	69		

2012 etHIN Region Common County Challenges

- Premature Mortality
 - Diabetes
 - Cancers
- Cardiovascular Disease

Current View of etHIN Data Participants



etHIN Transaction Count

As of
July 31, 2013

Transaction Count by Facility			
Transaction Type	Message Count Thru 7/08/2013	Message Count Thru 7/31/2013	Transaction Go Live Date
COVH ADT	7,705,475	8,357,180	3/8/2012
COVH LAB	4,096,302	4,409,408	3/15/2012
COVH MERGE	14,873	16,143	3/12/2012
COVH TRN	686,607	745,966	3/28/2012
COVH RAD	260,070	380,218	4/11/2013
COVH PATHOLOGY	3,661	7,283	5/22/2013
ETCH ADT	2,117,167	2,328,553	6/14/2012
ETCH CARD	4,469	4,906	6/27/2012
ETCH MERGE	1,230	1,359	6/14/2012
ETCH NICU	21,528	23,275	6/27/2102
ETCH RAD	115,681	124,543	7/11/2012
ETCH TRN	29,457	33,157	7/11/2012
ETCH LAB	346,223	383,919	9/20/2012
UTMC ADT	2,691,773	2,906,142	3/21/2012
UTMC MERGE	2,913	2,954	3/21/2012
UTMC RAD	233,106	257,826	7/16/2012
UTMC LAB	850,446	962,775	9/19/2012
UTMC TRN	149,378	163,216	6/5/2012
SMG ADT	233,267	355,801	4/3/2013
SMG MERGE	367	623	4/3/2013

Unique Patient Count 819,880

Grand Total **19,563,993** **21,465,247**

Grand Total Transaction Count						
ADT	Lab	Transcribed Reports	Rad	Merge	NICU (ETCH only)	Cardiology (ETCH only)
13,947,676	5,763,385	942,339	762,587	21,079	23,275	4,906



Whose else is etHIN working with?

Imminent “go live”:

- University Physician’s Association – in test / design
- Premier Surgical Associates – in test / design
- University Health Systems Physicians – in test / design
- Covenant Medical Management – in test

Signed DSA’s :

- Cherokee Health Systems
- Dermatology Associates of Knoxville, PC
- Knox County Health Department
- Knoxville Dermatopathology Lab
- Tennessee Orthopaedic Clinics
- University Radiology
- Westside Gastrointestinal Specialists

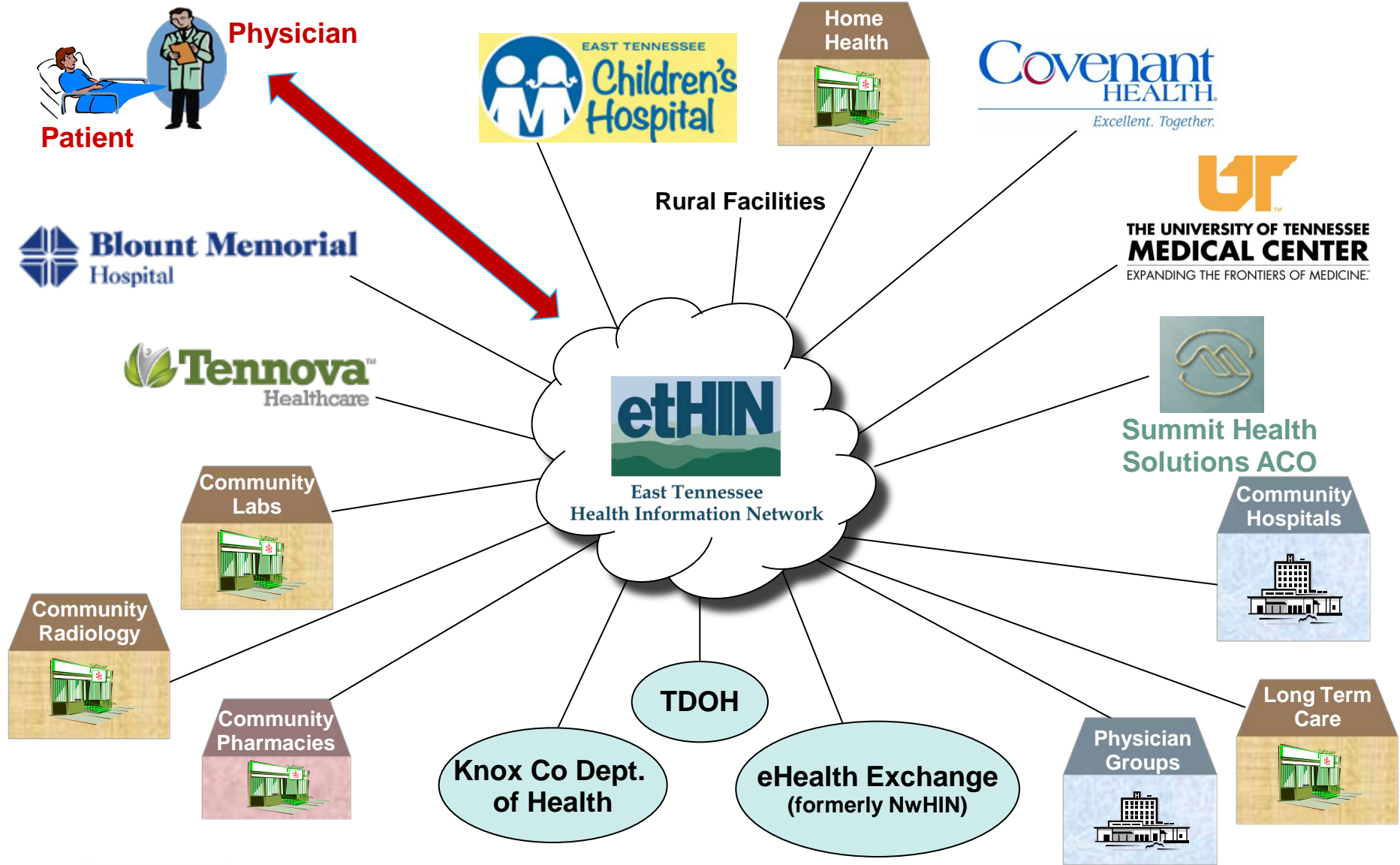
DSA’s Under Review:

- Allergy Asthma and Sinus Center
- Campbell, Cunningham, & Taylor
- Cumberland Medical Center
- Endocrinology Consultants
- Gastrointestinal Associates, PC
- HealthStar Physicians, PC
- Knoxville Gastrointestinal Specialists
- Knoxville Kidney Center
- Knoxville Pediatric Associates
- Mountain People’s Health Councils, PC
- Newport Internal Medicine
- Ortho Tennessee
- Tennova/HMA
- UTMC Hospice
- Vista Radiology
- West Knoxville Heart, PC

Numerous others ‘in discussion’



Future View of the etHIN Community



Many ways to connect: etHIN Products and Services

- ▶ **VHR** – Virtual Health Record / Physician's Portal / Secure Messaging with Referral Forms
- ▶ **EMR Lite & Clinical Inbox** / Secure Messaging with Referral Forms / Filtered Data Push
- ▶ **Integration of Practice EMR system** with Single Sign-On (SSO)
- ▶ **Immunization Registry / ELR connection** (other registries being considered)
- ▶ **Image Gateway** with Image Viewer
- ▶ **Orders-Results Matching Gateway**
- ▶ **etHIN DIRECT secure messaging** service (September 2013)
- ▶ **Patient Portal / PHR Marketplace OR Patient Portal** with Customizable Care Management Plans (4th quarter 2013)



Information Available through the HIE

(Patient Info page)

TUCKER, HELEN K [27-May-1944] - Windows Internet Explorer

https://ethintest.axolotl.com/EA/EmergencyDocuments.nsf/(wProduceTabbedI

File Edit View Favorites Tools Help

TUCKER, HELEN K [27-May-1944]

VHR Home | Administration | Inbox | Change Password | Home | Links | Help | Log Out

OPTUM™ VHR Patient Lookup Welcome, Ethin Admin - Monday, February 25

TUCKER, HELEN K - 05/27/1944 F Visit: Facility: From: 1/1/1998 To: 2/26/2013

All Summary Cumulative Lab Lab Radiology Reports ADT NWHIN Internal Office Memos Patient Info Open Report

Consent to Access Unknown (By Policy: Emergency)

Basic

Name: TUCKER, HELEN K
 Gender: F Age: 68 Years
 Address: 2855 E. WINDROSE LANE Born: 27-May-1944
 KNOXVILLE, TN 37919
 Home: (800) 555-1212 Email: ht2012@live.com
 Mobile: (223) 434-8002 Contact via: Email
 Work: (480) 472-1500
 Language: English Ethnicity: Not Hispanic or Latino or Spanish Origin

MRN or ID: 293126665 [UTMC]
 M00000199 [ETCH]
 01526 [SMG]
 140124 [Parkwest] Race: White
 50016 [BMH]
 000002303212 [Elysium]

Medical Insurance Plans Query

Internet | Protected Mode: On 110%

Information Available through the HIE

(Patient Info page continued)

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https://ethintest.axolotl.com/EA/EmergencyDocuments.nsf/(wProduceTabbedI

TUCKER, HELEN K [27-May-1944]

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Medical Insurance Plans

Insurance Co.	Plan	Benefit	Member ID	Grp ID	Admin.	Eff.	Exp.	CP	Primary Physician
Medicare	-	-	4567890	12345	-	01/01/12	01/01/13	\$20	Dr Smith

Allergies

First Noted	Allergy	Reaction	Group	Reported By
05/02/75	Codeine Sulfate	Nausea/Vomiting/Diarrhea	Morphine and Related	D. Jones
07/23/70	SulfADIAZINE	Skin Rashes/Hives	Sulfa Antibiotics	D. Jones

Ⓢ = Non-coded entries

Medications Last failed query: 01/31/13 02:19 PM * Expired.

Started On	Drug Name	Dose Form Strength	Sig	Stop On	Ongoing	Rx By
03/23/08	MetFORMIN HCl	Metformin HCl Tab 500 MG	1 tablet daily with food	01/07/14	>>	D. Smith
01/22/09	Lisinopril	Lisinopril Tab 20 MG	1 tablet daily		>>	D. Smith
02/09/09	Actonel	Risedronate Sodium Tab 5 MG	1 tab daily 30 min before meals with water		>>	D. Smith
02/01/12	PROzac	Fluoxetine HCl Cap 20 MG	1 capsule every morning		>>	D. Brown

Ⓢ = Free-text medication

Problems

Date Diagnosed	ICD-9	Description	Group	Chronicity	Last Noted	Reported By
06/20/00	250.00	DMII wo cmp nt st uncntr		Chronic		D. Jones
10/11/04	401.9	Hypertension NOS		Chronic		D. Jones
02/09/09	733.0	OSTEOPOROSIS		Chronic		D. Jones
02/01/12	311	Depressive disorder NEC		Chronic		D. Jones

Internet | Protected Mode: On 110%

Information Available through the HIE

(Summary page)

TUCKER, HELEN K [27-May-1944] - Windows Internet Explorer
 https://ethintest.axolotl.com/EA/EmergencyDocuments.nsf/(wProduceTabbedInterface)?OpenAg

File Edit View Favorites Tools Help

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All **Summary** Cumulative Lab Lab Radiology Reports ADT NwHIN Internal Office Memos Patient Info Open Report

Lab

<input type="checkbox"/>	1/11/2013 2:01:00 PM	E6	Comp Profile Pnl SerPI-mC...	ETCH	B Lightyear
<input type="checkbox"/>	1/11/2013 1:45:00 PM	E6	CBC W Auto Diff Bld	ETCH	B Lightyear
<input type="checkbox"/>	1/10/2013 6:04:00 PM	E000000547	Renal Func 2000 Pnl SerPI	ETCH	Y Al-Tawil
<input type="checkbox"/>	1/10/2013 5:55:00 PM	E000000554	Bas Metab 2000 Pnl SerPI	ETCH	Y Al-Tawil
<input type="checkbox"/>	1/10/2013 5:48:00 PM	E000002196	Calcium SerPI-sCnc	ETCH	M Miller

Radiology

<input type="checkbox"/>	1/15/2013 11:57:00 AM	500018	XR ELBOW 2 VIEWS LEFT	BMH
<input type="checkbox"/>	1/9/2013 1:12:00 PM	100390	CT HEAD WO CONTRAST	BMH
<input type="checkbox"/>	6/20/2012 7:19:00 AM		PXR PORT CHEST SINGLE VIE...	Parkwest
<input type="checkbox"/>	3/30/2012 9:19:00 AM		Screening Digital Mamm	BMH
<input type="checkbox"/>	3/29/2012 9:41:00 AM		US ABDOMEN COMPLETE	BMH

Reports

<input type="checkbox"/>	1/7/2013	100390	HISTORY AND	BMH
<input type="checkbox"/>	11/9/2012		Breast Exam - Normal	A Axolotl

ADT

<input type="checkbox"/>	1/15/2013 11:59:04 PM	500018	Discharge/end visit	BMH	M Beard
<input type="checkbox"/>	1/15/2013 8:38:25 AM	500018	Register a patient	BMH	M Beard
<input type="checkbox"/>	1/7/2013 11:59:05 PM	100390	Discharge/end visit	BMH	G Mangle
<input type="checkbox"/>	1/7/2013 9:56:18 AM	100390	Register a patient	BMH	G Mangle
<input type="checkbox"/>	12/12/2012 2:28:00 PM	E000002196	Register a patient	ETCH	M Miller

Internet | Protected Mode: On 110%

What is DIRECT?



DIRECT is a healthcare only secure email system that allows participants – *physicians, patients, clinical labs, and other healthcare providers* – to send and receive encrypted medical information directly to known, trusted recipients.

Source: <http://directproject.org>

Why Is Participation in Health Information Exchange through eHIN Important?

- ▶ **Participating with eHIN can enable Community healthcare providers to:**
 - **Access real-time patient information** anywhere you can access a browser
 - **Receive and share** information, or **refer** patients with/to other providers
 - Provide and access more information for clinical decisions, which should **lead to safer, more effective care**
 - **Reduce provider costs** related to faxing and associated personnel costs, redundant technology feeds, and duplicate testing
 - **Promote early detection, prevention, and management of chronic diseases**
 - Assure **safety and security of patients' health information when sharing**
 - Meet **Meaningful Use** objectives around data sharing
 - **Facilitate a more expedient, audited Orders and Referrals Process within the community**



The Coalition's Role in HIE

- What are the Coalition's near-term projects?
- What are the Coalition's long-term goals?
- How can etHIN's tools help the Coalition's projects and goals come to fruition?



East Tennessee Health Information Network

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