



the MidSouth eHealth Alliance Project

NGA
3-October, 2007

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Origins

"This might be an impossible dream, except for the fact that we already have right here in Tennessee the national leader in the field of medical informatics — Vanderbilt University Medical School. While we are at work saving TennCare, I'd also like to start building some of the foundations to turn it into a model for other states. I'd propose to start with one of our large providers — the Med in Memphis — and working with Vanderbilt and our own medical schools pioneer a real 21st century approach there. When it is successful, we can begin expanding it to other providers."

Bredesen, [Saving TennCare](#) - Address to the Tennessee Legislature, February 17, 2004

"Put plainly, my thesis this morning is, 'Enough with the grants, enough with the conferences, enough with new paradigms, enough with the pilot projects; this is good stuff; how do we actually get health care professionals and organizations to use it?' ."

Bredesen, [Keynote Address](#) – HIMSS, New Orleans, February 27, 2007

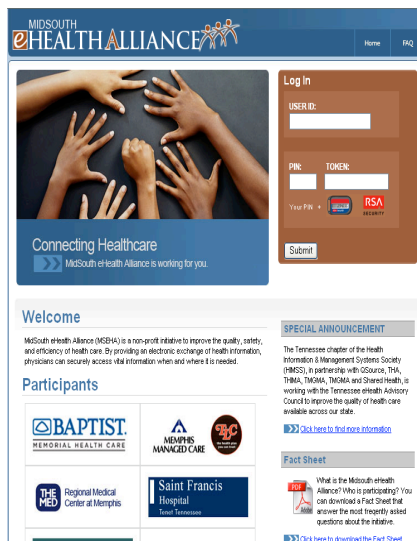
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The MidSouth eHealth Alliance – a 501(c)(3) corporation

Broad Participation

- Baptist Memorial Health Care Corp. (4 facilities)
- Christ Community Health (4 primary care clinics)
- Methodist Healthcare (7 facilities including Le Bonheur Children's Medical Center)
- The Regional Medical Center (The MED)
- Saint Francis Hospital & St. Francis Bartlett (Tenet Healthcare)
- St. Jude Children's Research Hospital
- Shelby County/Health Loop Clinics (11 primary care clinics)
- UT Medical Group (300+ clinicians)
- Memphis Managed Care/TLC (MCO)

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A collaboration with extensive reach and influence

- The Memphis BioWorks Foundation
- The Memphis Business Coalition
- Universities in Tennessee
 - Tennessee Tech
 - University of Memphis
 - University of Tennessee – Memphis
 - Vanderbilt University
- State collaborations
 - Governor's eHealth Council
 - State of Tennessee
 - Tennessee Hospital Association
 - Tennessee Health Information Management Association
 - Tennessee Health Information Management Systems Society
 - Hospital Alliance of Tennessee
- National collaborators
 - Regenstrief (Indiana)
 - Columbia Presbyterian (NYC)
 - eHealth Initiative
 - Markle Foundation
 - Robert Wood Johnson Foundation
 - American Health Information Management Association
 - Agency for Healthcare Research and Quality HIT National Resource Center

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A foundation for improved health

- Legal / policy framework
- Public Health (Robert Wood Johnson grant)
- E-prescribing (AHRQ contract expansion)
- Quality (AHRQ contract expansion)
- Community Action (Robert Wood Johnson; Healthy Memphis Common Table)
- Understanding of emergency department use
- Extension to safety-net clinics to strengthen “medical homes”
- Technology – Tennessee Tech support for state-level MPI
- Public Health (CDC)
- Retail pharmacy (coming soon)
- Commercial vendors (coming soon)

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Regional snapshot after one year of operation

- Total # of records: **989,629**
- Total # of patients: **810,000**
- Monthly Encounter Data: 110,000
- Monthly ICD-9 admission codes (Chief complaints): 34,000
- Monthly "Reason For Visit" messages in text: 110,000
- Monthly ICD-9 Discharge codes: 370,000
- Monthly labs: **2,400,000**
- Monthly white blood counts (9 hospitals): 51,975
- Monthly microbiology reports (May, 2007): 25,709
- Monthly chest x-ray reports: 34,996

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A day in Memphis

- Records: 33,000 per day
- Encounter data: 3,700 per day
- ICD-9 admission chief complaints: 1,000 per day
- "Reason For Visit" text: 3,700 per day
- ICD-9 discharge codes: 12,000 per day
- Procedure codes: 200 per day
- White blood counts: 1,799 per day
- Microbiology reports: 850 per day
- Chest x-ray reports: 1,200 per day
- Laboratory values: 80,000 per day

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We “get things done”

Over 200 users

- ED Staff including clinicians, registrars, and unit secretaries
- Between 70 and 95 percent of registered users used the system last month
- Since May, 2006, 900,000 encounters; more than 80,000 lab tests per day

Our goal is 100% use

- Records are currently sought on about 40% of ED visitors
- For these visitors between 30 and 60% have information from other sites

Anecdotally, our system affects care

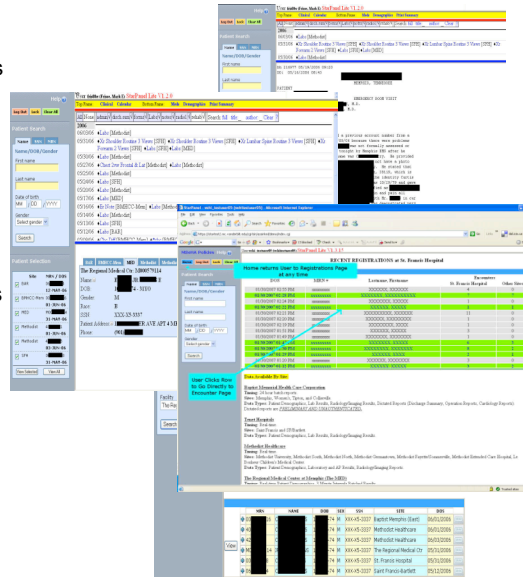
- Impact on patients with chest pain
- Avoidance of CTs and MRIs
- Avoidance of admissions

*The third principle centers on how we incorporate what we do into the mainstream, day-to-day business of delivering health care. Aside from early adopters and true believers, **how do you get ordinary, mainstream health providers to use this technology, how do you establish a reason powerful enough to compel large numbers of them to invest their time and resources and participate.** (Bredesen, HIMSS, 2007)*

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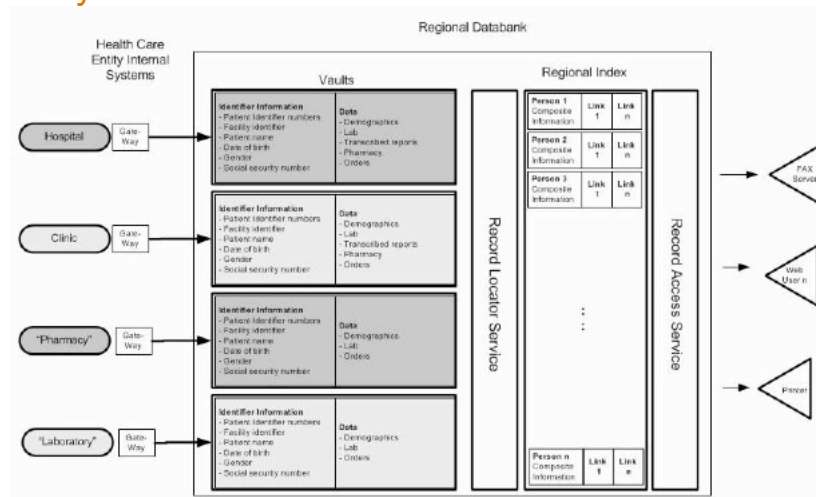
Data and access

- **Data available today**
 - Patient identification/demographics
 - Lab results
 - Encounter data: date of service, physician and reason
 - Dictated Reports
 - Imaging studies
 - Cardiology studies
 - Discharge summaries
 - Operative reports
 - Emergency room summaries
 - History and Physicals
 - Diagnostic Codes
 - Some medication history (TennCare Claims)
 - Etc.
- **Data to be available in the future**
 - Medication history
 - Allergies



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Every contributor maintains control of their data



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Standardized (LOINC) across sites

The screenshot displays a clinical information system interface. On the left, there is a 'Patient Search' form with fields for Name, SSN, HSN, Date of Birth, and Gender. Below this is a 'Patient Selection' section with a list of sites and methods. The main area shows 'Lab Panels' and a 'CBC (Complete Blood Count) (Graph)' table. The table lists various lab results with columns for Date, Location, HCT, HGB, MCH, MCHC, MCV, MPV, Platelet, RBC, RDW, and WBC. A graph on the right shows HCT (Hematocrit) and HGB (Hemoglobin) over time, with data points and error bars.

Date	Location	HCT	HGB	MCH	MCHC	MCV	MPV	Platelet	RBC	RDW	WBC
03/06/07 06:37	SFH	30.6*	10.0*	24.6*	32.7	75.4*	11.5	225	4.06	15.6*	5.28
02/26/07 04:35	BMHCC-Mem	26.7*	9.2*	25.8*	34.5	74.9*	8.7	232	3.5*	16.0*	4.9*
02/25/07 18:49	BMHCC-Mem	28.7*	9.8*	26.1*	34.0	76.6*	7.7	243	3.74*	16.6*	5.2
02/25/07 09:13	SFH	27.9*	9.2*	25.6	33.0	77.3*	7.6	225	3.60*	17.5*	4.60
02/13/07 14:35	BMHCC-Mem	28.9*	10.3*	27.4	35.5	77.0*	7.9	222	3.75*	16.7*	5.1
02/11/07 06:25	BAR	30.5*	10.1*	26.0	33.1	78.6*	7.9	240	3.88*	16.4*	4.90
02/11/07 16:58	SFH	34.1*	11.3*	26.1	33.2	78.6*	7.8	274	4.33*	17.8*	5.90
01/28/07 21:32	SFH	31.9*	10.6*	26.9	33.2	80.8	7.5	264	3.94*	18.3*	6.40
01/28/07 01:27	BMHCC-Mem	32.4*	11.1*	27.1	34.4	79.0*	8.0	269	4.10*	18.0*	7.2
01/26/07 01:40	BMHCC-Mem	31.3*	11.1*	27.6	34.6	79.8*	8.5	240	4.05*	17.4*	9.0
01/23/07 04:56	BMHCC-Mem	31.6*	10.8*	27.0	34.3	78.7*	8.3	204	4.01*	16.4*	3.8*
01/20/07 06:10	BMHCC-Mem	32.6*	10.9*	26.7*	33.5	79.5*	8.2	227	4.09*	16.0*	5.3
01/19/07 02:16	BMHCC-Mem	34.3*	11.5*	26.3*	33.6	78.3*	7.6	245	4.37*	16.1*	6.4
01/11/07 22:00	BMHCC-Mem	32.6*	10.5*	26.1*	32.4	80.8	7.8	273	4.03*	16.5*	4.7*
01/08/07 17:35	BMHCC-Mem	35.3*	11.8*	26.3*	33.5	78.6*	7.5	238	4.50*	16.4*	6.0

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Privacy and confidentiality are central

Participants:

- are allowed the use of the data for designated purpose of treatment and diagnosis only.
- signed a Registration Agreement that designates them as a Data Provider and/or a Data Recipient.
- signed a Data Sharing Agreement.
- have a vote on the policy committee known as the Operations Committee

Patients :

- are notified that their clinical data could be shared with the MidSouth eHealth Alliance..
- have the right to "Opt Out" of the system. It is assumed they are in the system until they "Opt Out".

Documents: <http://www.volunteer-ehealth.org>

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What is the MidSouth eHealth Alliance?

Certain health care providers in the Memphis area share health information through the MidSouth eHealth Alliance (the Alliance). The Alliance is a communitywide information system that helps health care providers in the treatment of patients. Providers are doctors, nurses, healthcare workers, hospitals and clinics.

Which organizations in the MidSouth eHealth Alliance share information?

The following organizations now participate in the MidSouth eHealth Alliance:

- Baptist Memorial Hospital/Coleville
- Baptist Memorial Hospital for Women
- Baptist Memorial Hospital/Memphis
- Baptist Memorial Hospital/Tipton
- Christ Community Health Services
- Memphis Managed Care/TLC
- Methodist Healthcare including LeBonheur
- Children's Medical Center
- Saint Francis Hospital Memphis
- Saint Francis Hospital Bartlett
- St. Jude Children's Research Hospital
- The Med
- Health Loop Clinics
- UT Medical Group Inc.

Why is health information shared?

Health care providers can make better choices about a patient's care and treatment when they have as much information as possible about that patient's health, lab tests, medical history, medicines, or other reports. The Alliance permits providers to review medical information in a system that is faster than contacting patient health care providers one by one. The Alliance only shares information about patient's medical condition with health care providers currently involved in that patient's care.

Is shared health information kept private and confidential?

Yes. The Alliance obeys all applicable federal and state laws about privacy of medical information. The Alliance will not share health information with anyone not involved in the care of a patient related to operations of the Alliance. Every organization and provider that shares or uses information from the Alliance must obey strict rules about security and privacy.

What are your rights?

As a patient, you have the right to not share your health information in the system called "Opting Out." However, if you choose to opt out, health care providers may not have access to health information that may be important and useful in making choices about your medical care.

If you have questions regarding your privacy rights, please refer to the Notice of Privacy Practice provided to you by your health care provider. If you need another copy of that Notice, please ask your provider to give you one. This Fact Sheet is intended for educational purposes only. Operations of the Alliance and the content of this Fact Sheet may be changed by the Alliance from time to time without notice.

Who do I contact for more information?

Every organization in the Alliance has a person who is responsible for privacy. When you have a question, ask for the Privacy Officer. He or she will be able to answer your questions or find someone who can help you.

Summary

- The MidSouth eHealth exchange is operational
- Although the results are preliminary, it is effective
- The Exchange is relatively low-cost
- The Exchange is scaleable
- The power of such an Exchange is only beginning to be explored
- The true impact has been on the community
 - Informed consumers concerning health care technology
 - Educated in the practical applications of technology, policy, and confidentiality
 - Changing the way care is delivered
- This is a very real production system
- It is delivering as promised

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VOLUNTEER EHEALTH INITIATIVE



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Previous

- [The MidSouth eHealth Alliance Data Sharing Agreements and Supporting Documents](#)
- [FORE / AHIMA Report](#)
- [The Tennessee eHealth Advisory Council](#)
- [Tennessee one of 9 States Participating in HHS / AHIMA Study](#)
- [Governor Predesen, Healthcare Leaders Launch Campaign to Help Thousands of Tennessee Physicians Start e-Prescribing](#)
- [Volunteer eHealth Initiative Described in Recent AHRQ-funded Report](#)
- [Technical Advisory Panel Member Featured in Wall Street Journal](#)
- [Doctors Explore Prescription Usage](#)
- [Harvard and Industry Partners Announce Open-Source, User-Centric Identity Management Project](#)
- [CareSpark to co-Sponsor May 6 EMR Meeting](#)

Tuesday, September 26, 2006

The MidSouth eHealth Alliance Data Sharing Agreements and Supporting Documents

As of September, 2005, the MidSouth eHealth Alliance (MSeHA) and the AHRQ/TN State regional demonstration project is receiving comprehensive clinical data (labs, reports, diagnoses, etc.) from 15 organizations and is in operation in several emergency departments in the greater Memphis Area.

Our work led us to conclude that data-sharing agreements are critical. This process was based on data-sharing and other documents from the Markle Connecting for Health Policy Group. The process took much longer than expected but served as a vital means of bringing over 50 people within the region to a more common, patient-centered goal.

The MidSouth eHealth Alliance is a non-profit company chartered specifically to manage the data exchange demonstration project and is supported by multiple sub-groups and an inclusive operations committee working continually on updating policies and procedures. We present on this site three documents produced in the course of our work.

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