

# Can Houston & Texas Afford HIT?

John C. Joe, MD, MPH  
September 22, 2010

## Overview

- Cost of implementing Health IT
  - Hospital electronic health records (EHR)
  - Community health information exchange (HIE)
- Cost of not implementing Health IT
  - Current costs for hospitals & community
  - Future trends for both
- Potential returns on HIT investments

## Cost of implementing Health IT

Hospital electronic health records  
(EHR)

### Houston Business Journal 8/06

- Texas Children's System: \$60 million on EHR
- The Methodist System: \$43 million on EHR
- MD Anderson Cancer Center:
  - More than 700 employees in IT department
  - More than 80 EHR software engineers
- Estimated total EHR investments throughout the Texas Medical Center: >\$250 million

## McKinsey Quarterly 8/10

- Average EHR costs per bed (~200 beds):
- External IT consulting \$27-30K
- Clinical software licenses \$20-22K
- Hardware \$15-25K
- Total training expenses \$10-12K
- Other software licenses \$5-6K
- Internal IT support \$3-5K
- **TOTAL \$80-100K**

9/22/2010

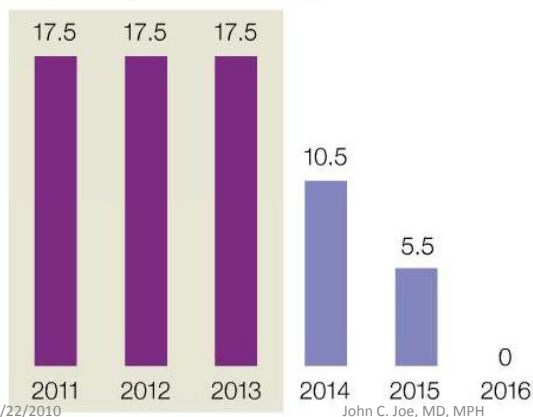
John C. Joe, MD, MPH

5

## McKinsey Quarterly 8/10

### American Reinvestment and Recovery Act (ARRA)/Medicare incentives per bed

Cumulative incentives based on year 'meaningful use' is achieved,<sup>2</sup> \$ thousand



Providers will capture the largest incentives if deployment occurs by 2013.

For the high-end scenario of \$100,000 in provider costs, cumulative incentives of \$17,500 represent a small portion of the total (~18%).

9/22/2010

John C. Joe, MD, MPH

6

## Cost of implementing Health IT

Community health information exchange  
(HIE)

### NYCLIX, Inc.

- “New York Clinical Information Exchange”
- A non-profit 501(c)(3) corporation
- Incorporated in November 2005
- Start-up costs for interfaces & training
  - Federal & state grants
  - In-kind contributions
- Member fees cover operating costs
  - Operations outsourced to vendor
  - Now self-sustaining

9/22/2010

John C. Joe, MD, MPH



8

## NYCLIX Participants

### Hospitals – Manhattan

- Beth Israel
- Mount Sinai
- New York - Presbyterian
- New York University MC
- St. Luke's - Roosevelt
- St. Vincent's

### Home Care

- Visiting Nurse Service of New York



### Hospitals – Outside Manhattan

- Kings County Hospital
- Staten Island Hospital
- Downstate

### Ambulatory

- Institute for Family Health
- Columbia Doctors

### Health Plans

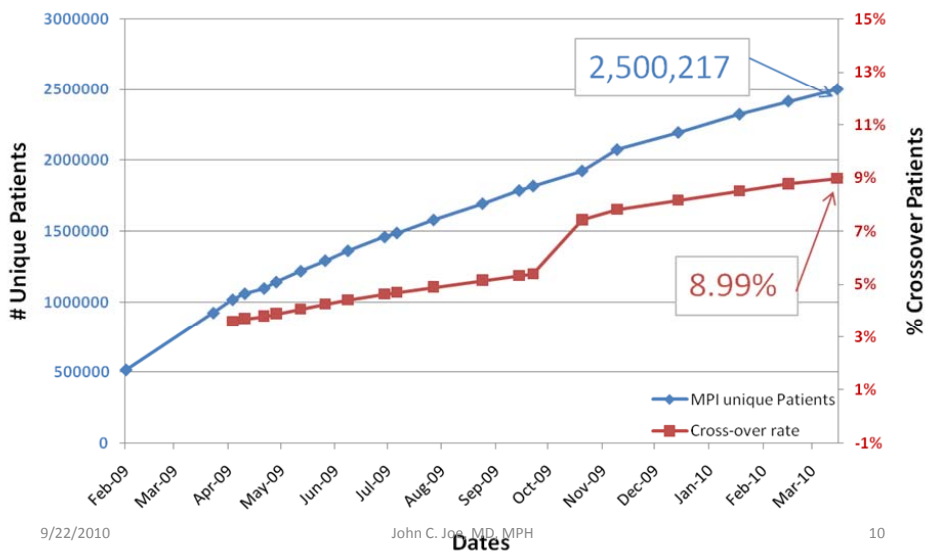
- SelectHealth

### Nursing Homes

- Village Care
- Hebrew Home for the Aged

## NYCLIX Patient Trends

# Unique Patients and % Crossover Patients<sup>1</sup>



9/22/2010

John C. Joo, MD, MPH

10

## Multi-Site Crossover Patients

| Number of Sites Visited | Count          |
|-------------------------|----------------|
| 2                       | 192,860        |
| 3                       | 26,901         |
| 4                       | 4,041          |
| 5                       | 656            |
| 6                       | 123            |
| 7                       | 52             |
| 8                       | 22             |
| 9                       | 4              |
| 10                      | 3              |
| 12                      | 1              |
| <b>Total</b>            | <b>224,663</b> |



John C. Hill, MD, MPH

## Cost of not implementing Health IT

Current costs for hospitals & community

## Greater Houston Context

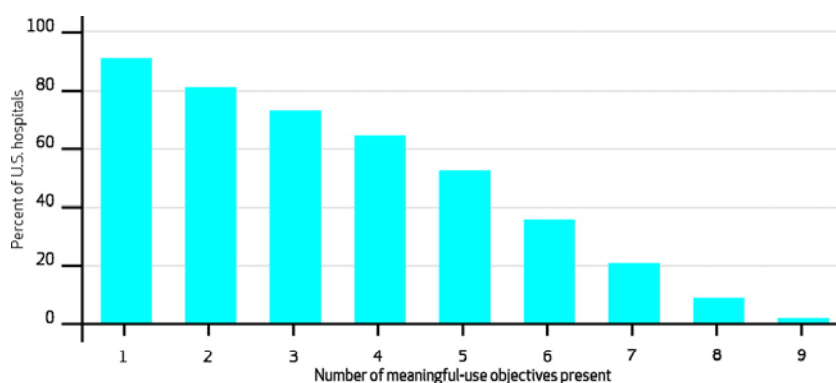
- Regional population of ~4.5 million
- Number who have no insurance: > 1 million
- Number who are underinsured: 500,000
- Kaiser FF 2008 data: 25.2% in TX uninsured
- Total 2009 safety net care nearly \$2 billion
- Typical private hospital with >200 beds:
  - More than \$12M uncompensated care / year
  - Some larger hospitals in excess of \$50M / year

9/22/2010

John C. Joe, MD, MPH

13

## National Hospital Context



**Primary deficiencies were lack of HIE function, drug interaction checking, quality measures reporting, and CPOE for meds**

HealthAffairs

9/22/2010

Ashish K. Jha, Catherine M. DesRoches, Peter D. Kralovec, and Maulik S. Joshi,  
 A Progress Report On Electronic Health Records In U.S. Hospitals. Aug 26, 2010

14

## Individual Patient Context


- Male born in 70's, HIV+ more than 15 years
- Chronic diseases: asthma, ulcers, seizures
- Primary care: FQHC going live w EHR in Nov
- Asthma exacerbation in local ED without EHR
- Presents at new clinic 24 hours post discharge
  - Chronic & acute medications?
  - HIV or AIDS: CD4, viral load, chest x-ray?
  - Timeliness of communication & care coordination

9/22/2010

John C. Joe, MD, MPH

15

ABOUT HCMS
MEMBERSHIP
CME
ETHICS
REFERENCE
SEARCH



**HCMS**  
Harris County Medical Society

- MEMBER LOG-IN
- FIND A PHYSICIAN
- MEETING RSVPs
- WHAT'S NEW
- NEWS
- BUSINESS OF MEDICINE
- QUALITY
- LEGISLATIVE ADVOCACY
- CALENDAR
- HEALTH INFORMATION TECHNOLOGY
- COMMUNITY HEALTH RESOURCES
- HEALTHCARE TRENDS
- LINKS
- MEDSERV/ PRACTICE SERVICES
- ADVERTISE WITH US
- PHYSICIAN CAREER CENTER
- NPI RESOURCES

9/22/2010

Path: [Home](#) : [Business of Medicine](#) : [Practice Management](#)[Business of Medicine](#) : [Practice Management](#)[Practice Management](#)

### Hospital Portals

**Keywords:** [Hospitals](#)

Below are Web portal links to hospitals in the Houston area for physicians to access their patients' clinical and billing information. (For some portals, Internet Explorer may be required.)

**Christus Health**  
(St. Catherine-Katy / St. John-Nassau Bay)  
[https://my.christushealth.org/dana-na/auth/url\\_13/welcome.cgi](https://my.christushealth.org/dana-na/auth/url_13/welcome.cgi)

**HCA Gulf Coast Division Hospitals**  
(Bayshore / Clear Lake Regional / Conroe Regional / East Houston Regional / Kingwood / Mainland / Spring Branch / Texas Orthopedic / The Women's Hospital / West Houston)  
[https://gulfoastra.cio.medcity.net/dana-na/auth/url\\_38/welcome.cgi](https://gulfoastra.cio.medcity.net/dana-na/auth/url_38/welcome.cgi)

**M.D. Anderson Cancer Center (UT)**  
<https://my.mdanderson.org/members/>

**Memorial Hermann System**  
Click on "PhysicianLINK" at <http://www.memorialhermann.org/forphysicians/>  
If accessing for the first time, see [https://www.newphysicianlink.org/MH\\_Insite\\_Login.htm](https://www.newphysicianlink.org/MH_Insite_Login.htm)

**The Methodist Hospital System**  
<https://sslvpn.tmhs.org/+CSOE+/logout.html?reason=18>

**St. Joseph Medical Center**  
[http://www.sjmctx.com/ourservices\\_drp.htm](http://www.sjmctx.com/ourservices_drp.htm)

**St. Luke's Episcopal Health System**  
<https://sourcenet.sleh.com/preauth/login.cgi>

**Tenet Hospitals**  
(Cypress-Fairbanks / Houston NW / Park Plaza)  
<https://secure.etenet.com/publicsite/default.asp>

**Tomball Regional Medical Center**  
<https://portal.tomballhospital.org/physiciansportal/Login/tabid/37/Default.aspx>

**Triumph Hospitals**      John C. Joe, MD, MPH  
<https://citrix.triumph-healthcare.com/vpn/index.html>

16



## Cost of not implementing Health IT

Future trends for hospitals & community

## Pitts - Health Affairs 9/10

- Emergency physicians
  - Constitute 4% of all doctors
  - Handle 28% of all acute care visits
- Uninsured patients received more than half their acute care in emergency departments (EDs)
- 2/3 of acute care visits to EDs took place on weekends or on a weekday after office hours
- ED patients often experience long wait times, typically rack up more expensive bills, and are more likely to receive duplicative tests

## Pitts - Health Affairs 9/10

- The Patient Protection and Affordable Care Act is expected to expand both funding for primary care and primary care coverage to 32 million people
- Unless coverage expansion is matched by a growth in primary care capacity, visits to already overcrowded EDs may actually increase
- Lesson from Massachusetts: ED visits increased even after insurance coverage expanded because the state was unable to quickly provide enough access to primary care providers

9/22/2010

John C. Joe, MD, MPH

19

## Boston Globe Findings

- 2006 MA law requires nearly all to have health insurance
- Expected to ease overuse of EDs as the newly insured went instead to primary care doctors for non-urgent health needs
- Patients with state-subsidized insurance have continued to use EDs at a rate 14% higher than MA residents overall
- State-subsidized patients with the lowest incomes, who formerly received free care in EDs and now pay a nominal fee, use EDs at a rate 27% higher than the MA average
- The average charge for treating a non-emergency illness in the ED is \$976 versus \$84 - \$164 to treat similar ailments in a primary care doctor's office

9/22/2010

John C. Joe, MD, MPH

20

## Mortensen - Health Affairs 9/10

- To reduce unnecessary use of hospital EDs by Medicaid enrollees, many states have begun copayments for non-emergency visits to EDs
- Results from the first study of its kind by Karoline Mortensen of the University of Maryland suggest that these cost-sharing policies have not been effective and do not reduce Medicaid enrollees' reliance on EDs

9/22/2010

John C. Joe, MD, MPH

21

## ACEP Member Survey 4/10

- 71% of emergency physicians expect ED visits to increase despite PPACA
- 61% don't believe the new law will effectively address uncompensated care
- 73% report crowding in their emergency departments at least 3 or 4 days per week; 23% reporting at least 5 days per week, and 24% reporting every day

9/22/2010

John C. Joe, MD, MPH

22

## ARRA Medicare Reductions

McKinsey Analysis, August 2010:

- Average EHR cost per bed: \$80-100K
- Average ARRA-mandated fines per bed:
  - 2015: \$2,000 per bed / year
  - 2019: \$35,000 per bed / year

9/22/2010

John C. Joe, MD, MPH

23

Potential returns on HIT  
investments

## McKinsey Quarterly 8/10

- EHRs linked with bed management and resource scheduling software can save more than \$20K/bed/yr in labor utilization alone
- EHRs with CPOE can save \$8-15K/bed/yr in reduced medication errors and drug-allergy and drug-drug interactions
- EHRs linked with revenue cycle software can recover more than \$4K/bed/yr in unbilled services

9/22/2010

John C. Joe, MD, MPH

25

## CITL Texas Study 2006

- Center for Information Technology Leadership
- Study for the Gulf Coast Health IT Task Force
- Modeled the value of EHR+HIE across Texas
- Projected \$14.2B statewide annual savings
- Eliminate more than 150,000 preventable adverse drug events (ADEs) annually
- Eliminate more than 13,000 hospitalizations annually due to preventable ADEs

9/22/2010

John C. Joe, MD, MPH

26

## Aligning Costs & Returns

|     | Cost                    | Return                        |
|-----|-------------------------|-------------------------------|
| EHR | Providers               | Payers, Patients<br>Providers |
| HIE | Government<br>Providers | Payers, Patients<br>Providers |

August 2010: Aetna, Highmark, UnitedHealth, and WellPoint announce pay-for-performance programs that will align with ARRA Meaningful Use criteria



## Discussion