

# The Economic Impact of A Cultural and Behavioral Change In the Healthcare of Our Community



Economic Club

May 27, 2008

## About JCMR

- **Founded** - 2005
- **Joint Venture** - Jackson Physicians Alliance and Foote Health System
- **Mission**  
To improve the quality and delivery of healthcare with a consistent approach to medical recordkeeping and reducing the cost of healthcare

## The State of JCMR

- **The Numbers**

Providers – 126

Practices – 41

Users - 603

Patients in database – 50,000+

Average encounters per month –  
11,000+

Staff – 13 Full time and 3 Part time

Growth – 100+ Implementations in '08  
- '09

## JCMR IT Strategy

### Develop a System to Share Clinical Data Across All Clinical Settings

- Compliance, best practices and standardization
- Paperless - Electronic
- Share information across continuum of care
- Increase patient safety
- Improve patient outcomes
- Integrated Care Management

## JCMR Client Services

- Assessment of operational needs
- Compliance with best practices and standards of care
- Comprehensive educational curriculums and services
- Implementation support for the rollout of the NextGen/JCMR systems
- Sustainment of NextGen/JCMR systems
- Development and deployment of system enhancements

"...Within 10 years, every American must have a personal electronic medical record, that's a good goal for the country to achieve. The federal government has got to take the lead in order to make this happen by developing what are called technical standards."

George W. Bush  
January 27, 2005

**A step in solving the \$19 billion Medicare issue.**



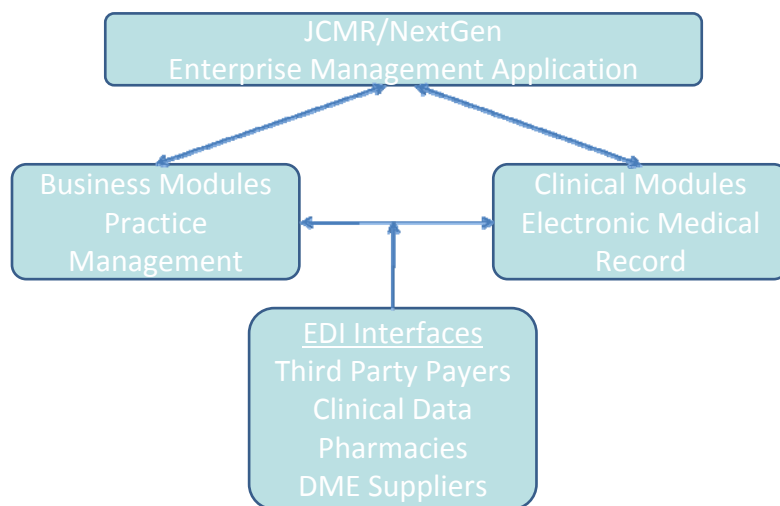
### Definition

A comprehensive tool to facilitate business operations and compliant clinical documentation.

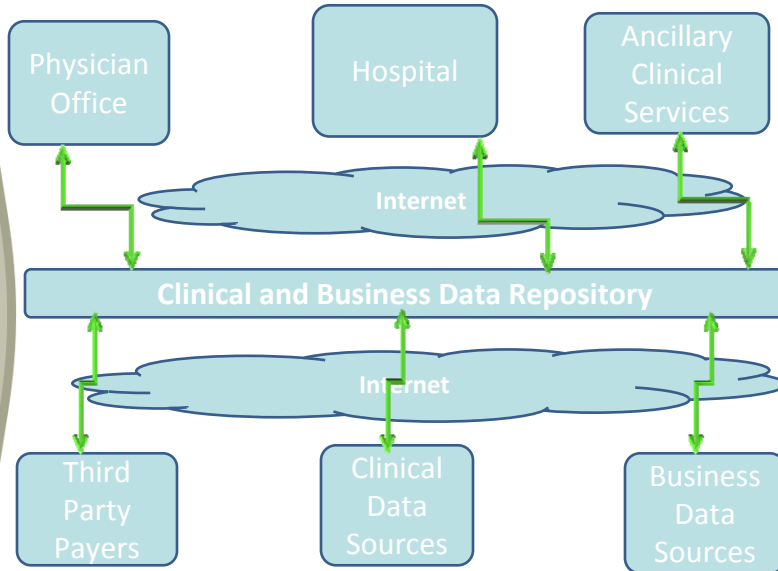
### Vanilla Flavored

JCMR and Clients build the flavor

## Application Integration



# Health Information Network Overview



# NextGen<sup>emr</sup>

Encounter | HPI | History | ROS | PE | Reports | Dx/Plan | Dispo

Patient Name: Test, Jeremy      Age:      Sex: F

**Post Op Visit**  
 Reset Global      Date: 11/16/2007  
 Last Procedure: Post Op Visit      Add  
 Date      Sig Procedure      CPT  
 11/12/2007      Circumcision      54150

Days Post Procedure: 53 Days  
[After Care Visit](#)

**Medications**

Medication	Dose	Sig Desc
VICODIN	5MG-500MG	
OxyFast	20MG/ML	as needed
na VPRN	RINPRN	

**Allergies**

Ingredient/Allergen	Brand Name
NO KNOWN ALLERGIES	
DICLOXACILLIN	Diamox
FAMOTIDINE	Peppid

**Vital Signs**

Date	Time	Temp	Pulse	Resp	Systolic	Diastolic	Ht (in)	Wt (lb)	Weight Oz	EMI	Pulse Ox
11/16/20	2:40 PM	102.0	102		120	90					
08/02/20	9:54 AM	98.0		100							
07/31/20											

**Procedure History**

Date	Description	ICD9	Provider
01/08/2008	UA W/Micro/Automated		9E699A40-AD2A-4D90-AE

## Economic Impacts of JCMR

### HEALTHCARE TRANSACTIONS IMPACTED BY JCMR

Transaction Type	Current Annual Volume	Projected Annual Volume
Office Visits	\$20,460,000.00	\$102,300,000.00
Diagnostic Testing Orders	\$6,520,800.00	\$32,604,000.00
Medication Orders	\$2,189,220.00	\$10,946,100.00
Professional Services	\$15,540,000.00	\$77,700,000.00
<b>Economic Impact on Healthcare Expenditures In The Community</b>	<b>\$44,710,020.00</b>	<b>\$223,550,100.00</b>

**Jackson County Annual Healthcare Costs - \$865,624,833.00**

*Sources: CMS, National Center for Health Statistics - CDC US Census Bureau, Kaiser Family Foundation, National Health Expenditure Accounts, Annual JCMR encounters – 132,000*

## Healthcare Cost Reductions from the JCMR Patient Safety Systems

### ADVERSE DRUG EVENTS

	ADE's Expected in JCMR Population Without EMR	ADE's Expected in JCMR Population	Current ADE Annual Savings	Full Deployment ADE Cost Savings
Ambulatory Care ADE Occurrences	4356	3136	\$2,419,260.00	\$12,096,300.00

*Sources: Localized data from the Institute of Medicine of the National Academies, American Journal of Health-System Pharmacy.  
Current annual JCMR encounters – 132,000*

## MEDICATION RELATED EXPENDITURES

	Cost	Population	Total Cost
Pharmaceutical costs per person in Jackson County	\$772.00	163851	\$126,492,972.00
Cost of non compliance per person in Jackson County	\$147.44	163851	\$24,158,191.44
<i>Total per person medication and non compliance costs</i>	<i>\$919.44</i>	<i>163851</i>	<i>\$150,651,163.44</i>
Increased generic usage savings	\$100.00	163851	\$16,385,100.00
Compliance improvements	32.7% Non-Compliant	163851	\$49,262,930.44
<b>Total Potential Improvements</b>			<b>\$65,648,030.44</b>
<i>Total per person medication and non compliance costs</i>	<i>\$518.78</i>	<i>163851</i>	<i>\$85,003,133.00</i>

## Healthcare Information Technology Vision for the Jackson Community

JCMR is a key part of a broader vision

## JACKSON IS UNIQUE

### What We Have

**Community-wide EMR (JCMR) with over 50,000 patients & 11,000 visits/month**

**Over 100 providers**, including CFH, JCHD (very high percentage vs. other communities)

Inpatient and Emergency Room **EMR & CPOE systems**

In the **top 1% of hospitals** (& communities) in clinical I/T deployment

**Telemedicine pilot** for CHF patients

**Proven health improvement programs** with a model that aligns incentives (IYL)

## JACKSON IS UNIQUE

### What We Have

Rules engine for **follow-up phone calls** and **community disease management program**.

**Medication Assistance Program**

**Medication Therapy Management**

(Coumadin) Service

**Strategic alliance with Priority Health**

Collaborative **strategic discussions**

Potential **Demonstration Site** - Jackson is a one hospital community **like 1,000 others** across America.

## What's Ahead?

What if we could further leverage our IT investments to:

- Help patients navigate the health system?
- Keep patients from falling thru the cracks?
- Improve chronic disease management?
- Support community health improvement?
- Reduce costs?

What types of things could we do?

## Integrated Care Management

*If patient was discharged from the hospital 7 days ago with a diagnosis of acute asthma & No Physician Office Visit yet then;*

- Call to check on patient

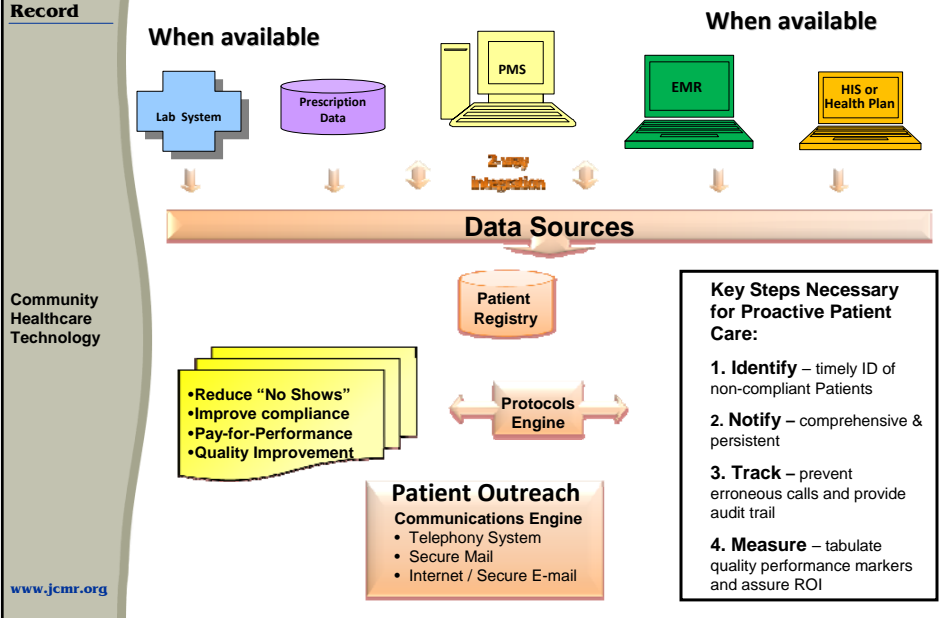
*If patient has Hypertension and they have not picked up their prescription within 2 days then;*

- Call patient to see if they need assistance with medication compliance

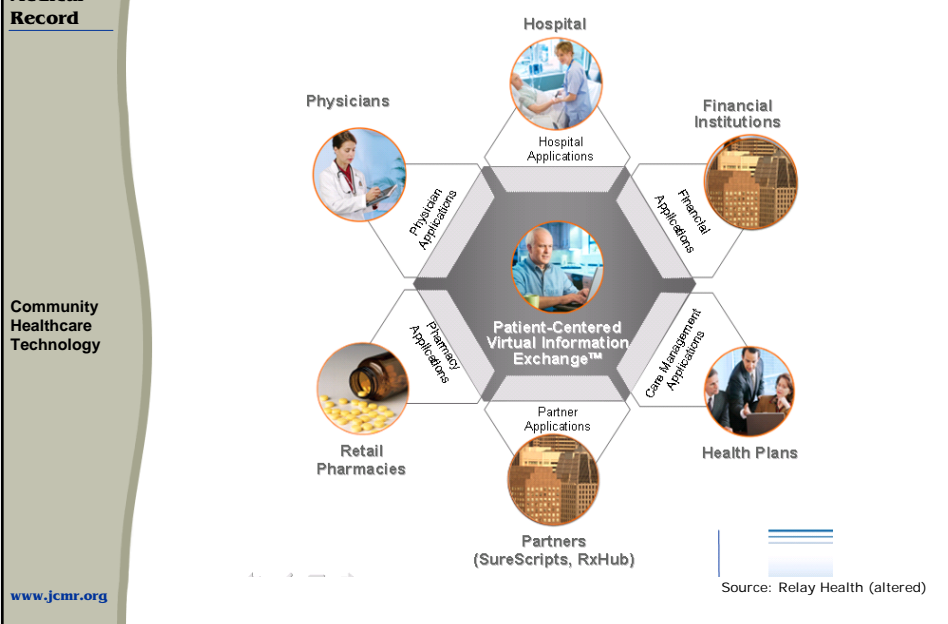
*If a patient has diabetes and no HbA1c (lab) in 6 months and we have their email address then;*

- Email reminder with a link to schedule a visit for the Diabetes Center or their doctor.

## Integrated Care Management Prototype Concept



## PATIENT CENTERED INFORMATION



## Consumer Portal Example

**Foote Health System** Privacy Info Help Contact Support Sign Out Josh Prime

Home Your Doctors Message Center Health Records Account

Secure Online Healthcare  
 Message Your Provider  
 Message the Office Staff  
 Appointments  
 Lab Results  
 Prescription Refills  
 Referrals  
 Quick Links  
 Update Your E-mail Address  
 Change Your Password  
 Change Your User ID  
 Provider Web Pages  
 Kent MD  
 Dr. Marc Frank  
 Amanda Gamer MD  
 Cardiology Lab General Hospital  
 Dr. Laura Watson MD  
 Sophia Wise M.D.  
 Do You Like This Service?  
 Tell a Doctor  
 Tell a Friend

**Welcome Josh**  
 Use the options on the left to begin a message to your healthcare provider. When your provider replies, you will be notified at normal@rets.health.com. Use this service only for non-urgent communications.

**New Messages** You can view all messages in your [Message Center](#)

Message	From	Date
<a href="#">Referral to Sophia Wise M.D.</a>	Amanda Gamer, MD	Feb 21, 2008
<a href="#">RE: Check in on your care</a>	Amanda Gamer, MD	Jan 24, 2008
<a href="#">RE: Schedule Appointment</a>	Amanda Gamer, MD	Jan 24, 2008
<a href="#">Clinical Results have been released to your Patient Health Record</a>	Amanda Gamer, MD	Jan 16, 2008
<a href="#">Test Results - Aug 20, 2007</a>	Amanda Gamer, MD	Jan 16, 2008

**Reminders**

- Do you need to update Health Records for [Sally Prime](#)
- Do you need to update Health Records for [Xavier Prime](#)
- Do you need to update Health Records for [Cindy Prime](#)
- [Link to a New Doctor](#)
- [Add a Family Member](#) to your account to send messages on their behalf
- [Set Up Your Account](#)

### Features

1. Administrative and Clinical Access
2. Multiple Physician Relationships
3. Central Inbox for Message Management

## Integrated Care Management Working Concept

Objective	Goal	Plan	Task	Frequency	Next Due	Notification
<b>Diabetes Mgt</b>	Get it in control	Work on diet & monitoring	HgA1c	Monthly	1/1/08	1. Email reminder 2. Phone call from phys ofc
<b>Health Maintenance</b>	Increase exercise	Weekly treadmill walk 5x for 30 min	Log progress.	Weekly	1/7/08	1. Email
			Call coach	Quarterly	3/31/08	1. Email reminder 2. PHR 3. Coach call you.
<b>Hypertension</b>	Control blood pressure	Medication: xyz 100mg 2x/day	Take as prescribed	Renew quarterly	1/31/08	1. Email reminder 2. Automated phone call reminder 3. Phys ofc followup.
		Monitor	Record in PHR	Daily	1/1/08	1. Weekly email if not recorded in PHR.
<b>CHF</b>	Reduce fluid retention	Monitor via Telehealth	Weigh self	Daily, first thing in the morning	1/1/08	1. Call pt if not recorded daily.
<b>Shoulder Replacement</b>	Surgery & rapid recovery	<u>Before surgery:</u> 1) Lab work 2) Radiology 3) PT  <u>Surgery</u> <u>After surgery:</u> 1) Lab work 2) Radiology 3) PT	CBC MRI Exercises OR CBC MRI Exercises	Once Once 3X/week for 3 wks OR Once Once Once 3X/week for 6 wks	Today Tomorrow Monday 1/30/08 1/30/08 1/31/08 2/1/08	NMS Navigator call NMS Navigator call to remind of prep. NMS Navigator call

## Supports Economic Development

- Improves health of community
- Slower growth in costs of healthcare
- More attractive for business
- Improves physician recruitment & retention
- Adds high tech resources (SmartZone)

## Summary

- Jackson is very unique → Health IT
- We have many tools to transform healthcare in Jackson.
- We can build a safety net to help keep people from falling thru the cracks.
- We can facilitate the right care at the right time and prevent costly encounters.
- We can help make Jackson an even better place to live, work and raise a family.
- We can be a demonstration site for the country.

**Jackson  
Community  
Medical  
Record**

Community  
Healthcare  
Technology

[www.jcmr.org](http://www.jcmr.org)

**If you have any questions regarding  
this presentation, please contact:**

Rick.Warren@wafoote.org  
517-788-4827