

Jose C. Lacal

CGU 12/2005 - “*Seamless Health Record*”

No Formal US Health Delivery System

..The most striking feature of the employed, insured, middle-income system of care is the absence of any formal system. Each family puts together an informal set of services and facilities to meet its own needs. The system, therefore, has no formal structure or organization and is different for each individual or family.

Indeed, each family's system may vary widely according to the particular situation in which it is used. The only constant feature of this system is the family itself; all other aspects are transient, changeable, and widely varied.

..In summary, the employed, insured, middle-income family's system of health care has been an informal, unstructured collection of individual services put together by the patient and the private physician to meet the needs of the moment. The individual services themselves have had little formalized interrelationship, and the only thread of continuity is provided by the family physician or by the family itself. In general, all of the services are provided by non-governmental sources and are paid for by private funds, either directly out-of-pocket or by privately financed health insurance plans.

Source: "Introduction to Health Services." 6th Edition; Stephen J. Williams; Paul R. Torrens; Delmar Thompson Learning; 2002. p. 21-22.

From EBM to Evidence-Based Health

- **Evidence-Based Medicine: how to treat sick patients.**
- **Evidence-Based Health (“EBH”): dissemination of best-practices to keep people healthy and prevent illness.**
- **Healthcare system not geared towards optimizing health:**
 - focused on repairing bodily damage
 - few incentives to improve, maintain patients’ health
 - dis-organized and not coordinated across providers
- **Growing consumer interest in staying healthy.**
- **Demographic wave: push health services out of facilities**
- **Challenge of deploying HIT in Less-Developed Countries**

Summary: Seamless Health Record

- *Family-centered, portable, personalized, prevention-oriented Seamless Health Record platform of services to maintain, enhance, and restore an individual's health. Leveraging growing power and sophistication of mobile computing and communication devices and the expanding capabilities of wireless networks.*
- **“Seamless Health” has several meanings:**
 - Goes with me, physically (my health data is mine)
 - Goes with me, across providers
 - Goes with me, across employers / payers
 - Goes with me, across time and distance
 - Emphasizes prevention
 - Focused on the family as the unit of care
 - “Wherever I Go, It's There” (WIGIT). ATMs from Alberta to Auckland.

} Significant issues
with uninsured, and
under-insured, and
Medicaid populations.

Search

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Last Viewed

Girl 01

Boy 02

Boy 01

Brain Biopsy Specimen..

Lorraine (Mother)

Jose C. Lalac Lalac

Appointment with orthoped..

Marco's speech thera..

Bethesda Speech Specialis..

Pediatrician: reimburse..

My Upcoming Appointments

through

next week

(2005-12-10)

Close	Subject	Date	Accept?
☒	Call speech therapist.	2005-11-30 12:00	☒
☒	EHR Symposium at CGU.	2005-12-02 20:00	Accepted

My Top Open Bills & Claims

Bill / Claim	Provider Name	Amount	Close
Pediatrician: reimbursement	Seitz Pediatrics, LLC	\$ 123	2005-12-12

My Open Cases

Close	Num.	Subject	Account Name	Priority	Status
☒	1	Marco's speech therapy plan.	Bethesda Speech Specialists	Medium	New

My Leads

Name	Date Created

My Open Tasks

Close	Subject	Priority	Due Date

New Care Plan

First Name:

Last Name: *

Phone:

Email:

CRM for Family Health Improvement

- Mom, the Chief Medical Officer
- Family health dashboard: dependents' status:
- Summary of bio-physical readings
 - Readings from sensors in parents' home
 - Summaries from all published research
 - Recommended dietary guidelines
 - Storage of family's medical records
 - Latest evidence-based guidelines published
 - Available via cellphone, PDA, office, home
- Everything is technologically possible NOW.
The question is why isn't this level of service and patient-centered focus available to consumers today.

“All Should Have PHRs”

But neither at the Hospital nor at the Physician’s office.

Katrina proves all should have PHR

By ALEX CUKAN

ALBANY, N.Y., Sept. 14 (UPI) — Part 12 of a continuing series. Of the more than 1 million people displaced by Hurricane Katrina, only a small percentage have access to their personal health records — some 50,000 U.S. veterans treated at Gulf Coast VA Medical Centers.

“Every VA hospital has a real stable CPOE (computerized physician order entry system),” Joan Ash, an associate professor in the Department of Medical Informatics and Clinical Epidemiology at the Oregon Health & Science University’s School of Medicine, told United Press International. “It’s the only place where all in-patients and out-patients have computerized medical records. Almost all medical students or interns spend some time in a VA facility, so all new doctors have had access and worked with health information technology.”

Along with the 80 patients from the New Orleans VA Medical Center who had been transferred to the Michael E. DeBakey VA Medical Center in Houston on Aug. 31, were the backup computer tapes containing the patients’ records.

Posted 9/11/2005 8:42 PM Updated 9/11/2005 10:02 PM

New Orleans faces shortage as doctors move on

By Julie Appleby, USA TODAY

Meeting the medical needs of up to 1 million hurricane evacuees scattered across the country looms as an enormous challenge. Most of them are without their medical records or any way to contact their physicians; many are suddenly without jobs and at risk of losing their medical coverage; and as a group, they’re disproportionately likely to be needy and sicker-than-average.

“Ensuring that these individuals get access to health care, wherever they are, is our biggest issue,” said Dr. Fred Cerise, who heads Louisiana’s Department of Health and Hospitals.

Posted on Mon, Sep. 12, 2005

Katrina displaces thousands with HIV

MARTHA MENDOZA
Associated Press

About 8,000 people with HIV and AIDS who were displaced by Hurricane Katrina now face the massive challenge of trying to manage their disease without their doctors, their clinics and their support systems.



Mobile Computing, Communication Device

THE Global Personal Computing Device

- **User Interface**

Screen Size: 176 X 220
Screen Color: 64K colors
16-bit, TFT
External Display: 96 x 64
Nav/Joystick: 8-way + Center-select

- **Camcorder and 1.3 Megapixel Camera.**

Capture pictures and record up to a one-hour session of video, which can be sent as images or short video clips using the multimedia messaging service*.

- **Music Player:**

play MP3 audio files stored on either the memory card or the phone even when the handset is closed.

- **Removable Memory Card:**

transflash card enables users to save media including music, video and pictures on a removable card available at various sizes (128MB, 256MB and 512MB).



- **J2ME(TM)**

MIDP 1.0; MIDP 2.0
CLDC 1.0; CLDC 1.1
Location API; PDA Packages
Mobile 3D Graphics; Web Services
Mobile Media including audio, digital camera, image utility, and video playback support
Wireless Messaging API 1.1
WMA 2.0 MMS; Bluetooth
Scalable 2D Vector Graphic

- **Messaging & Data:**

Image File Formats: WBMP, PNG w/ Transparency and Alpha, JPEG
Video Playback: Motion JPEG, MP4, H.263
Audio Format: 16-chord polyphonic MIDI, WAV, AU, VSELP, AMR, MP3, AMBE (Java only)
Packet Data
SMS; MMS
AGPS

Security Issues Addressed

- Security
- DRM (iTunes)
- NFC / Proximity Payment
- Over-The-Air (OTA) “kill”
- Fingerprint recognition
- Cryptography
- Secure data storage



November 2005						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
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	<u>Boy 02</u>
	<u>Boy 01</u>
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	<u>Bethesda Speech Specialis...</u>
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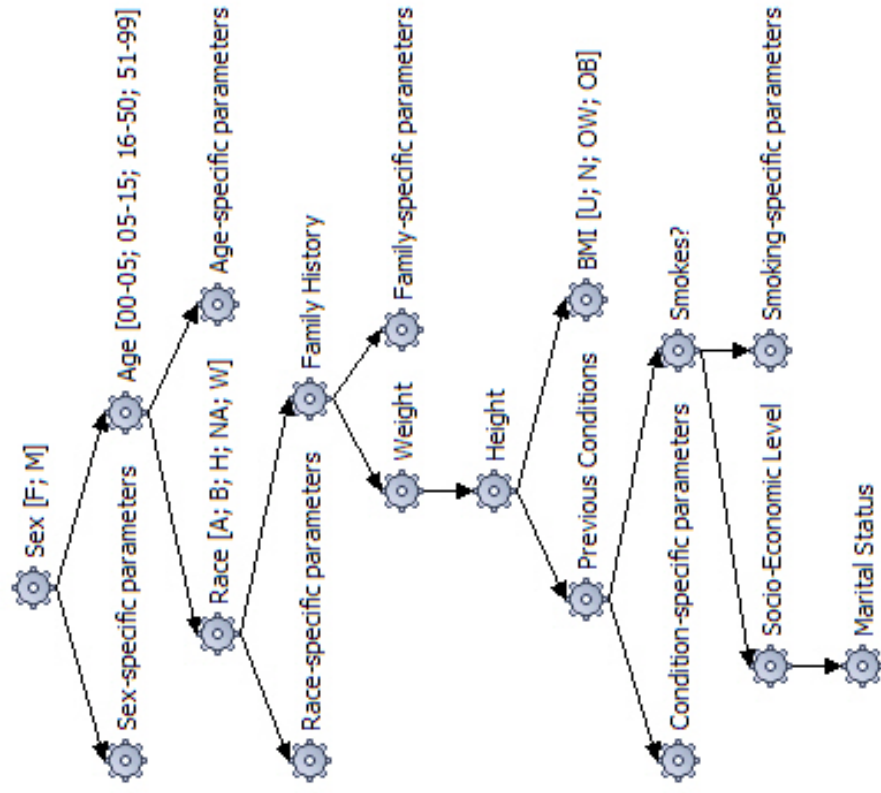
My Top Open Bills & Claims

My Open Cases

My Leads

My Open Tasks

Creating a Family Profile



Name	Jose	Wife	Boy_01	Boy_02	Girl_01	Dad	Mom
Sex	M	F	M	M	F	M	F
Age	41	3x	> 10	> 10	> 10	6x	6x
Race	H	W	H	H	H	H	H
Family History	No	No	No	No	No	No	No
Weight	6"						
Height	160						
* BMI	21.7						
Prev. Conditions	No	No	No	No	No	No	No
Smoking	No	No	No	No	No	No	No
Socio-Economic	Middle	Middle	Middle	Middle	Middle	Middle	Middle
Marital Status	Married	Married	Single	Single	Single	Married	Married
Health Index	Exc.	Exc.	Exc.	Exc.	Exc.	Good	Good
Phys. Activity	Low	Low	Middle	Middle	Low	Low	Low
Issues	Commute	Stress	None	None	None	None	None
Environment	No	No	No	No	No	No	No

Search

Search

Dependents: Home

Dependent Search

Name:

Only my items: ☐

Search

Clear

Dependent List

☐ Name	Total Estimated Effort (hrs)	Total Actual Effort (hrs)	Assigned To
☐ Boy_01			JCLacal
☐ Boy_02			JCLacal
☐ Girl_01			JCLacal
☐ Lorraine (Mother)	0	0	JCLacal
☐ _Dad			JCLacal
☐ _Mom			JCLacal

Check All - Clear All

Update

Delete

Assigned To:

-None--

Dependents: Lorraine (Mother)

Edit

Duplicate

Delete

Name: Lorraine (Mother)

Assigned To: JCLacal

Description:

Total Estimated Effort (hrs): 0

Total Actual Effort (hrs): 0

Dependent Tasks

Create
Name
Appointment with orthopedist.
Progress (%)
0
Status
In Progress
Assigned To
JCLacal
Date Due
2005-12-16
edit del

Open Activities

Schedule Meeting	Schedule Call	Compose Email
Close	Subject	Status
☒	Call speech therapist.	Meeting Planned
Contact	Related to	Due Date
	Lorraine (Mother)	2005-11-30
edit	del	

History

Create Note or Attachment	Archive Email
Subject	Status
 10/25/2005: Notes of speech therapy session.	Note
Contact	Related to
	Lorraine (Mother)
Last Modified	2005-11-28 11:50  

Contacts

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	<u>Pediatrician: reimburse...</u>

Last Viewed

Lorraine (Mother)

Girl 01

Bov 02

Bov 01

Brain Biopsy Specimen...

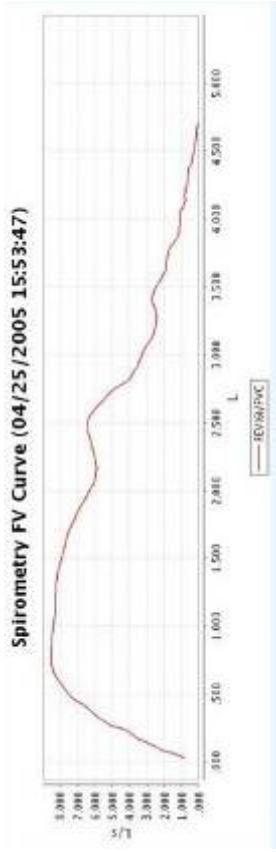
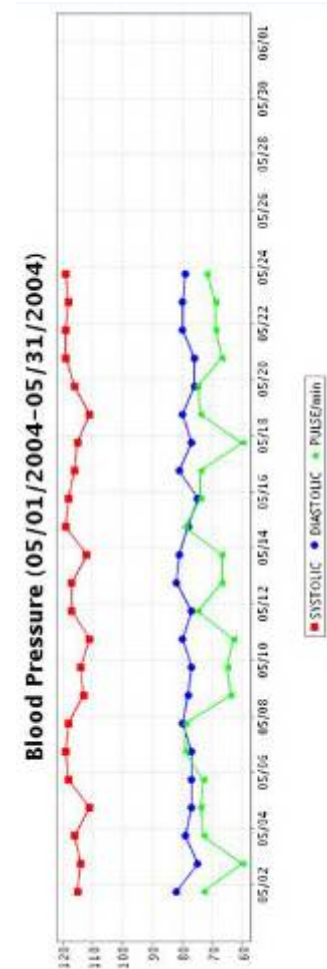
Jose C. Lacal Lacal

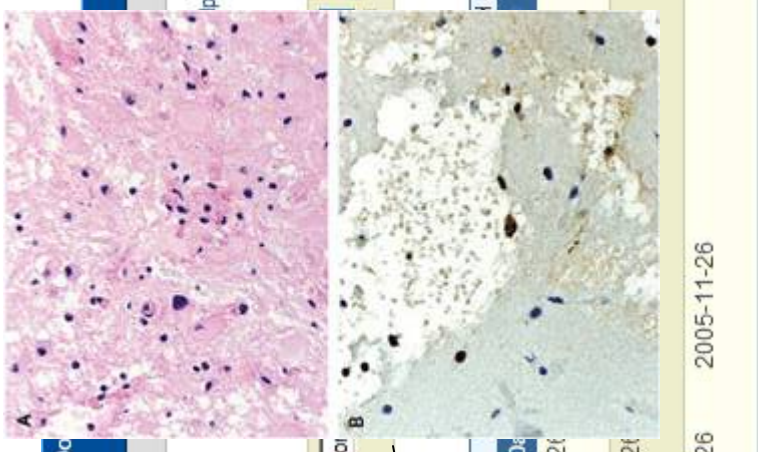
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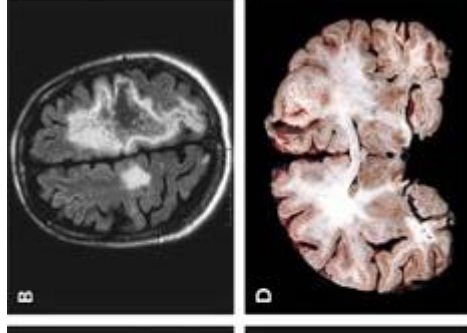
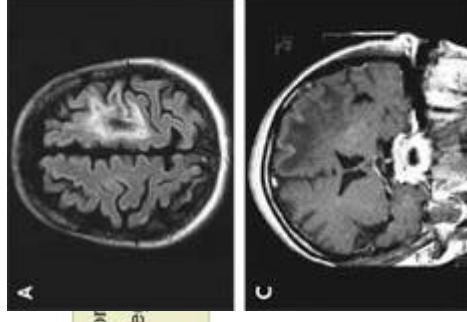
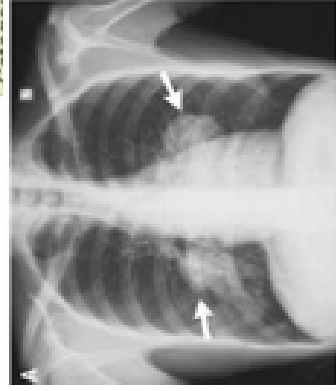
[Document List](#)

☐	Document	Category	Sub Category	Revision	Published By	Revision Date
☐	Brain Biopsy Specimen	Marketing	Marketing Collateral	1	Jose C. Lacal Lacal	2005-11-26 17:40
☐	Head x-rays	Marketing	Marketing Collateral	1	Jose C. Lacal Lacal	2005-11-26 17:40
☐	Thoracic x-rays	Marketing	Marketing Collateral	1	Jose C. Lacal Lacal	2005-11-26 17:41

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[Update](#) [Delete](#)

Publish Date: (yyyy-mm-dd)



Nutrition: Home

Nutrition Plan Search

Name:

Only my items:

☐

Search

Clear

Advanced

Nutrition Plan List

Export

Nutrition Plan

Status

Type

End Date

User

Start

Previous

0 - 0 of 0

Next

End

Check All - Clear All

USDA

NUTRIENT DATA

LABORATORY

ARS

Agricultural Research Service

USDA National Nutrient Database for Standard Reference

Release 16-1

NOTE:

The USDA National Nutrient Database for Standard Reference, Release 18 is now available and supersedes previous releases. Access to Release 16-1 of the USDA National Nutrient Database for Standard Reference is provided here for those users who may wish to use it for historical reasons.

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“Seamless Health Record” presentation, v. 07 – CGU 12/05

In Closing: Take Home Points

- **Focus on health improvement**
 - limited savings on critical care
 - lower burden of chronic disease
- **Individual as the Point of Care**
 - not the house, institution, office
- **Family as the unit of care:**
 - empower Mom, the defacto Chief Medical Officer
- **Personal Health Records**
 - owned by the family
 - provide service across jobs, HMOs, hospitals, physicians
- **Who would host this HRM?**
 - Financial institutions / brokers
 - Quicken / Microsoft Money
 - US Postal Service
 - Google (eg. “Google Health”)
- **Looking for active partners to develop this prototype further.**
- **Credit: prototype server built using www.SugarCRM.org**