

The Community Hospital Perspective: Technology, Partnership and Care

Presented by:

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VALLEY PRESBYTERIAN HOSPITAL

Excellence in All We Do

About Us

350 Bed Independent Community Full Service Hospital

Selected Annual Statistics

- 5,375 Discharges
- 1,658 Pediatric Discharges **
- 3,572 Live Births *
- 7,431 Surgeries
- 62,797 ER visits (13% conversion to IP)

* Most births from any hospital in SFV

** Most patient days for dedicated pediatric unit in SFV

62% of all patients and 92% of birth mothers are Medi-Cal beneficiaries

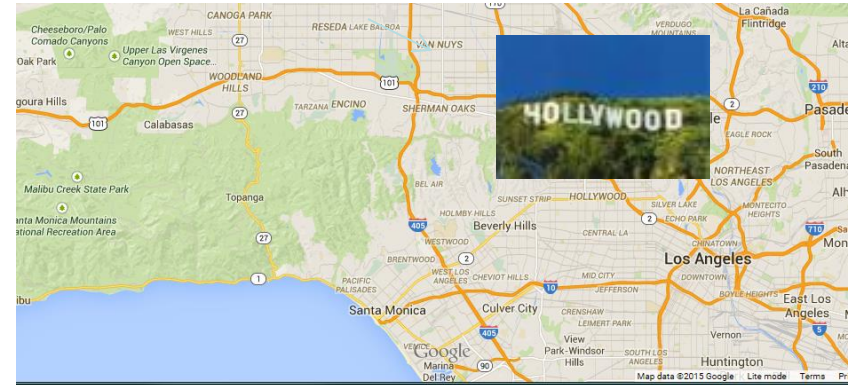
35% of community live below Federal Poverty Level

Up to 40% of community populations have limited English proficiency

ED Utilization growing in San Fernando Valley (faster than LA)

- Safety net services (DSH. Majority Medicare and Medicaid mix)
- Medical staff of > 600 physicians
- Employees > 1600
- STEMI, Stroke, EDAP Certifications

Located just behind the Hollywood sign mountain



About Us...



Some Attributes of a Community Hospital ...

Executive Team

- C-Suite recognition of the technology value
- Participation in all hospital decisions
- Operational and strategic influence
 - Other operational responsibilities
 - AOC
- Board meetings/retreats
- Result:
 - Governance
 - Strategic alignment

Access

- Users and stakeholders are only down another corridor
- Clinical and operational directors and managers serve as stakeholders
- Rounding
 - IT has their “nose in everyone’s business”
- “Forgiving” – we’re all in this together
- Physician relationships

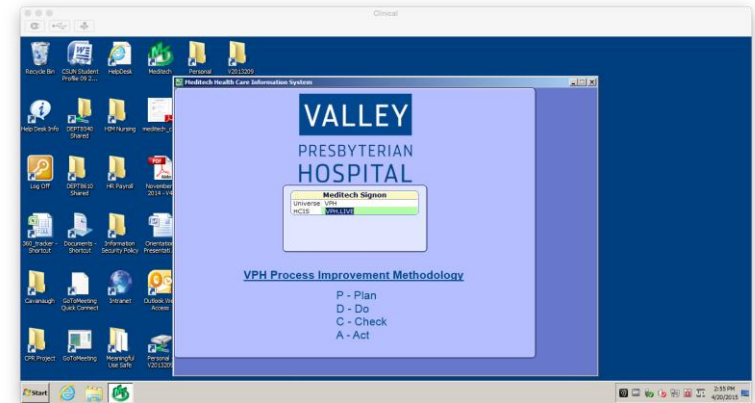
Some Attributes of a Community Hospital

Community loyalty

- Brand awareness / community involvement
- Payer mix
 - Defines your community
 - Knowing your cost and revenue structure

The “ACO Question”

- “No, but...”
- Capitation (128,000 Medi-Cal)
- Partnership



Make a difference

See the results

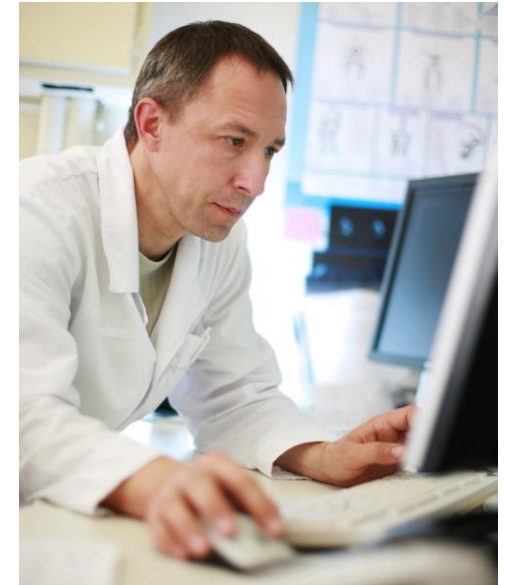
Feel the reward

- Executive Team
 - Board
 - Medical Executive Committee
 - Quality Committee
- Medical Informatics Committee
 - Typical PAC functions (Technology)
 - Order sets, Pdoc
 - Physician Champion (CMIO like)
- Clinical Transformation Steering Committee
 - Nursing, HIM, Ancillaries, etc
 - “Decision documents”
 - CPOE/orders
 - EMR nursing documentation
 - “Forms committee” functions

Major Initiatives

Clinical Process Redesign Plus (CPR+)

- Meaningful Use
- EMR expansion, optimization
- CPOE (Adoption over Standardization)
- PDOC
- Scanning/Archiving
- Dragon
- eRX
- HIMSS Analytics EMRAM Mapping
 - In one year: 3.4 to 5+ (1 task to get to 6)



Major Initiatives ...

Clinically Reliable Infrastructure (CRI)

VDI

Win XP to 7

Clinical computing appliance

Disaster Recovery

Network (refresh, redesign, WAN)



Information Technology Strategy and Framework

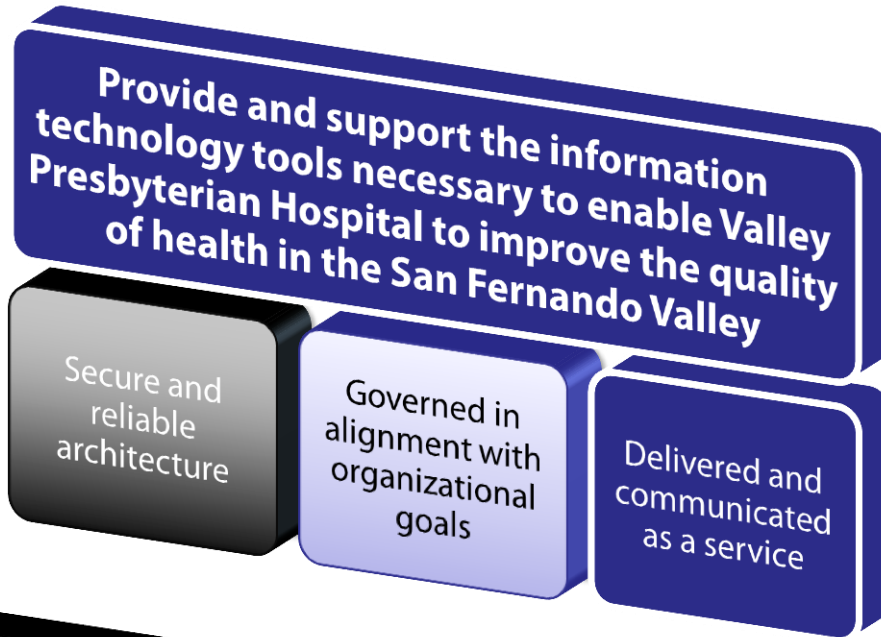
Maxims

Positioning

Stewardship - Cloud



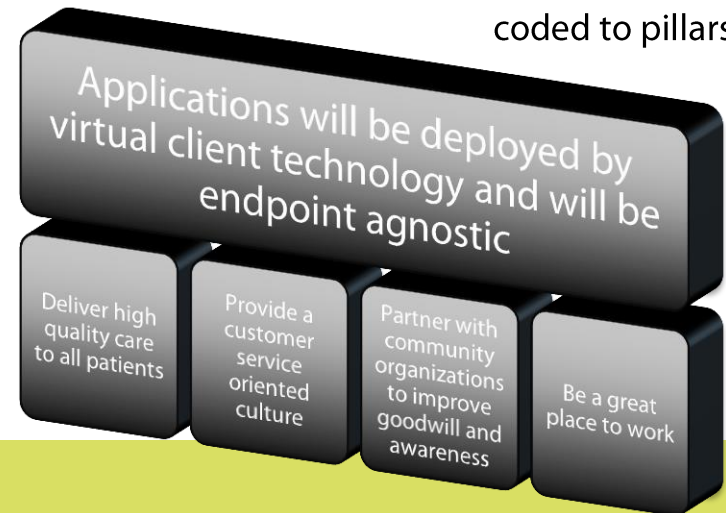
Maxim examples (out of 16) ...



Mission

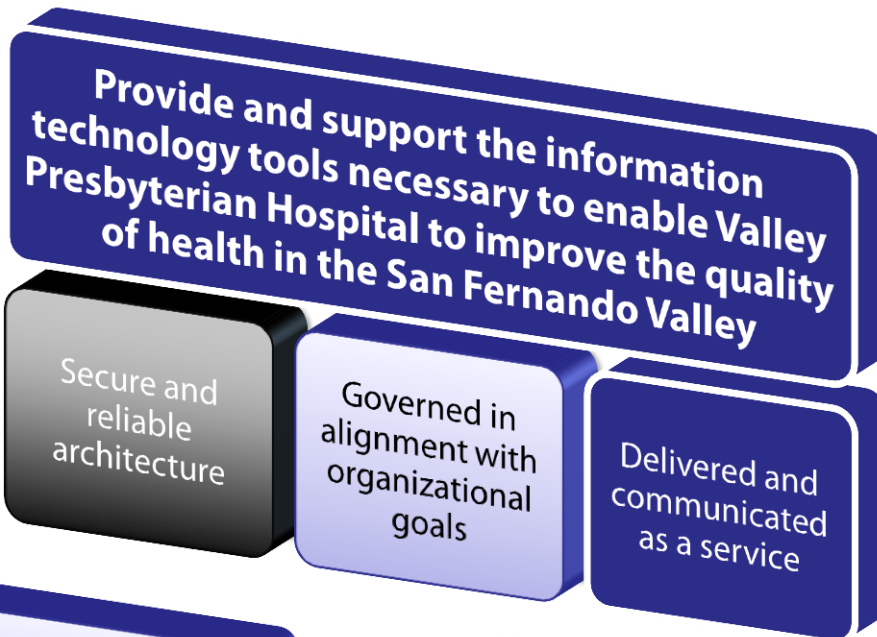


Aligned to hospital pillars



Maxims (color coded to pillars)

Maxim examples



Three stories...

1. Summary of Care
2. VDI
3. Disaster Recovery

Story 1: What is a Summary of Care?

Patient Name

Referring or transitioning provider name

Procedures

Diagnosis

Immunizations

Lab Results

Vital Signs

Smoking Status

Functional Status

Demographic information

Care Plan

Care Team

Discharge Instructions

Current Problem List

Current Medication List

Current Allergy List



Meaningful Use Stage 2 for the “Eligible Hospital”

CMS Meaningful Use Core Measure 12 (of 16)

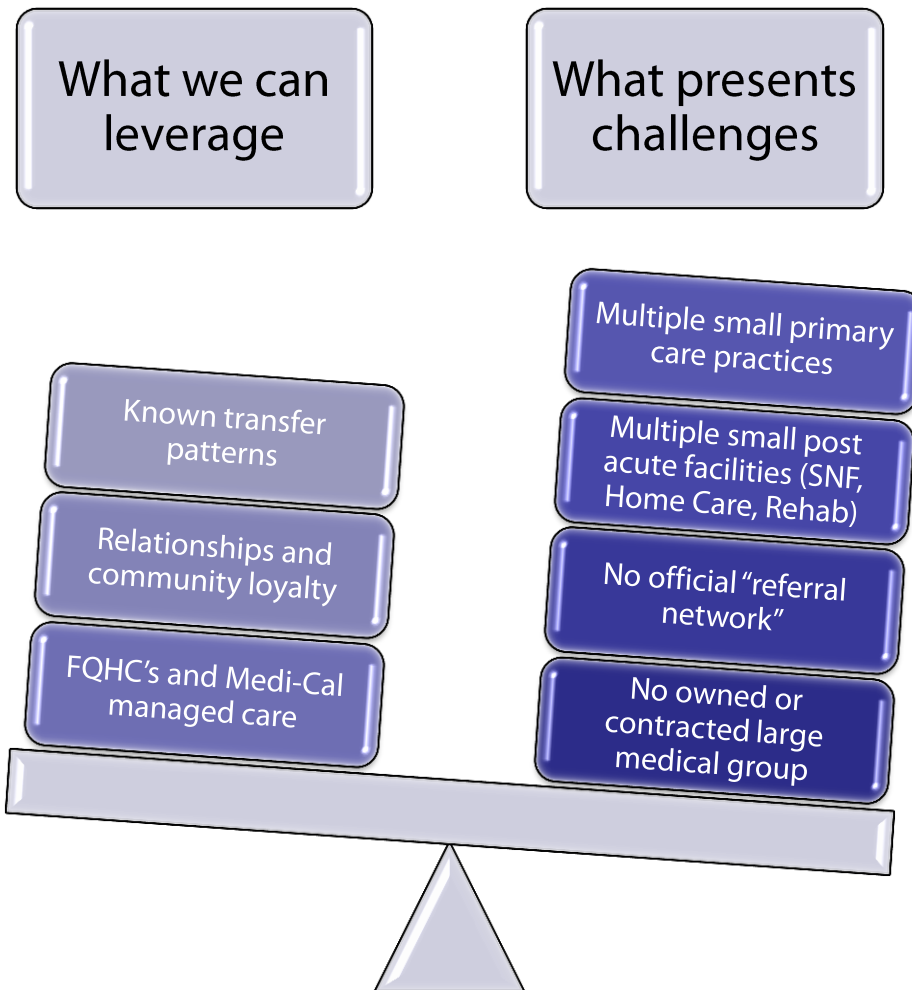
Measure has three sub measures. We are focused on the second of these.

Sub Measure 2:

- The **eligible hospital or CAH that transitions or refers their patient to another setting of care or provider of care provides a summary of care record for more than 10 percent of such transitions and referrals** either (a) electronically transmitted using CEHRT to a recipient or (b) where the recipient receives the summary of care record via exchange facilitated by an organization that is a NwHIN Exchange participant ...
- DENOMINATOR: Number of transitions of care and referrals during the EHR reporting period for which the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) was the transferring or referring provider
- NUMERATOR: The number of transitions of care and referrals in the denominator where a summary of care record was a) **electronically transmitted using CEHRT to a recipient** or b) where the recipient receives the summary of care record via exchange facilitated by an organization that is NwHIN Exchange participant or in a manner that is consistent with the governance mechanism ONC establishes for the nationwide health information network. The organization can be a third-party or the sender's own organization
- THRESHOLD: The percentage must be **more than 10 percent** in order the eligible hospital or CAH to meet this measure

(a) Refers to “Direct”; (b) Refers to a HIE with specific capability

The Environment (Independent Community Hospital)

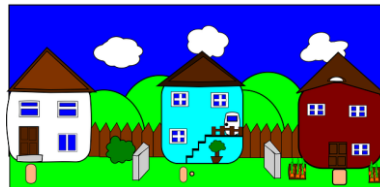


The Objective and its Challenges

- Transfers to post-acute
 - Facilities are not typically “Meaningful Use aware”
 - EMR environment is very different
 - Heavily dependent on fax communication between discharge planners and intake staff
 - Occasional transfers to different hospitals
- Primary Care follow up
 - Providers are more “Meaningful Use aware” – but not enough
 - Providers have a more familiar EMR environment
 - Often there are gaps in understanding relevant functionality
- Internal Understanding within the hospital – Process issues
 - Who understands the discharge process? Who owns it?
 - Free text vs structured
 - Can you rely on the discharge summary from the physician?
 - Case Management guidelines
 - The flood of paper has a life of its own
 - Capturing the correct PCP for follow up at admissions or recording it during stay
 - How to introduce summary of care into the process of accepting a transfer

Strategies used

- Leverage a Webmail portal
 - Sharing our direct address structure
 - Removes technical barriers for recipient
- Educate physician offices about their own EMR
- Educate Case Management
- Educate nursing
- Educate the primary care clinics
- Rely on our neighbors
 - Emergency transfers



“Web Portal” Access by Post-Acute Facility

You have received a new DIRECT message!

California Direct [cadirect-noreply@axesson.com]

Sent: Thu 8/20/2015 11:14 PM

To: David Menapace

Dear California HealthandRehab,

You have received a new DIRECT message.

Please log into your Direct Message System at <https://cadirect.org/mail/> to retrieve your message

We have also notified the following delegates:

- * Elvira Pasada (california.hr.elvira)
- * David Menapace (valleypres.it.davidmenapace)

First: Email alert arrives

The screenshot shows a webmail interface in Internet Explorer. The browser address bar shows https://cadirect.org/mail/?_task=mail. The page title is "(18) Mirth Mail Webmail :: Inbox - Internet Explorer". The interface includes a navigation bar with "Provider Directory", "Chat", and "WebMail (18)". Below the navigation bar is the "CaliforniaDirect" logo and a toolbar with icons for Refresh, Compose, Reply, Reply all, Forward, Delete, and Mark. A search bar is visible on the right. The main content area displays an inbox table with columns for Subject, From, Date, and Size. The inbox contains several messages, including "XDM/1.0/DDM Originated Message" and "Document For Patient: M000004135".

Subject	From	Date	Size
XDM/1.0/DDM Originated Message	valleypres.him.default@dire...	Thu 13:25	27 KB
XDM/1.0/DDM Originated Message	valleypres.him.default@direct.v...	08/12/2015 14:35	19 KB
XDM/1.0/DDM Originated Message	valleypres.him.default@direct.v...	07/22/2015 12:30	21 KB
XDM/1.0/DDM Originated Message	valleypres.him.default@direct.v...	07/20/2015 12:19	27 KB
XDM/1.0/DDM Originated Message	valleypres.him.default@direct.v...	07/20/2015 12:07	17 KB
Document For Patient: M000004135	henrymayohospitalccdtest@dire...	07/14/2015 16:26	71 KB
Document For Patient: M000004135	henrymayohospitalccdtest@dire...	07/14/2015 16:26	71 KB
Document For Patient: M000004135	henrymayohospitalccdtest@dire...	07/14/2015 16:26	71 KB
XDM/1.0/DDM Originated Message	richard.seidman.p1@direct.nev...	07/13/2015 09:45	393 KB
XDM/1.0/DDM Originated Message	richard.seidman.p1@direct.nev...	07/13/2015 09:40	207 KB
XDM/1.0/DDM Originated Message	valleypres.him.default@direct.v...	07/09/2015 10:40	27 KB

Next: Follow link and log into portal

Our best successes

- Major FQHC partners
 - Using NextGen EMR
 - NextGen Share from MEDITECH HIS
- Major post acute facilities
 - Skilled nursing
 - Rehab
 - Webmail portal with our direct address
- Receipt of Summary of Care during transfer

Story 2: VDI

It takes too long to log on!



Even with a card reader!

Authenticate and wait...

VDI Partners

System Integrators:

- Build and support the “back end”:
- Single sign-on and VDI design, build, and MSO implementation
- Who has done it before?

Mix of solutions:

- VMWare – Horizon Virtual Desktop environment
- HP – Servers
- EMC – Storage
- Imprivata – OneSign proximity badge access and single sign-on
- MEDITECH – MSO configuration
- iGel – Convert legacy to thin clients/provides central management



Environmental analysis

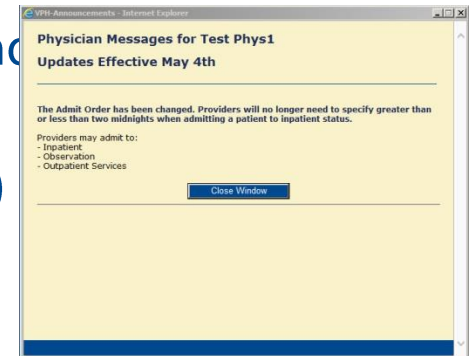
- Approximately 1200 PC's in use
- 80/20 rule:
 - Approximately 80% used by clinicians at the point of care
 - 20% identified as “power users” or “information workers” Target for Win 7 PC's
 - Target for VDI: 80%



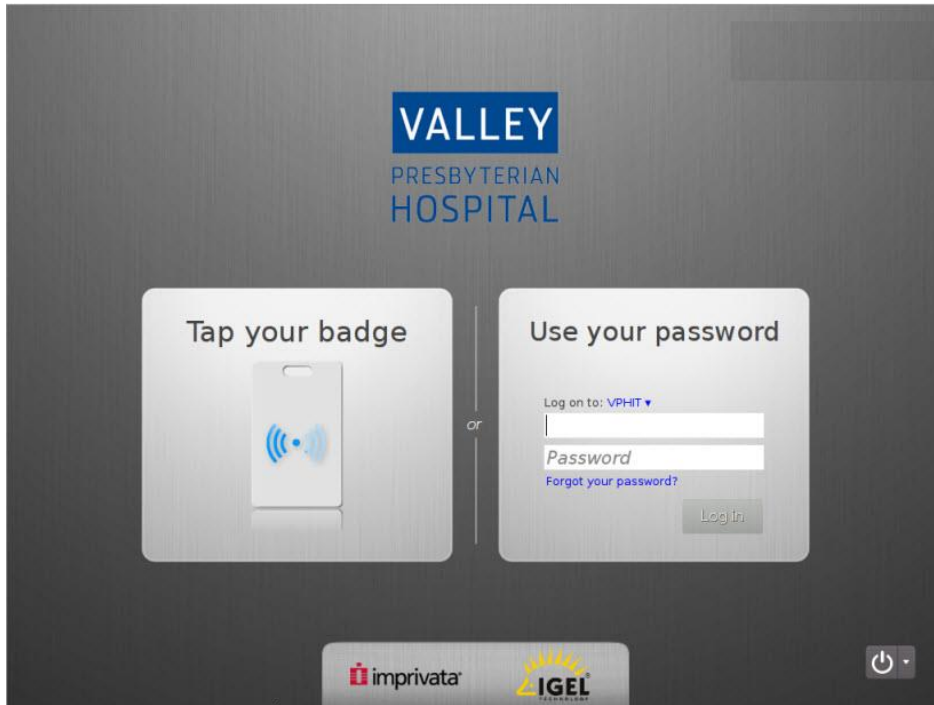
Shifting the paradigm



- “Demote” the PC – from *Workstation* to “*Clinical computing appliance*”
 - Minimal software required to perform clinical functions
 - MEDITECH, PACS, Email, Browser
 - Eliminate underutilized MS Office applications and therefore reduce licensing costs
 - Leverage web/html (e.g., pop up messages, help)
 - eSign Challenges: e.g., Word/RTF to MEDITECH text editor conversion



What it looks like



Outcomes



- Steady measured reduction in password reset tickets
- Provider remote sessions consistent with workstation sessions within hospital
- Standardized user experience
- One “desktop” to manage
- Quick learning curve
- Win 7 conversion in one fell swoop



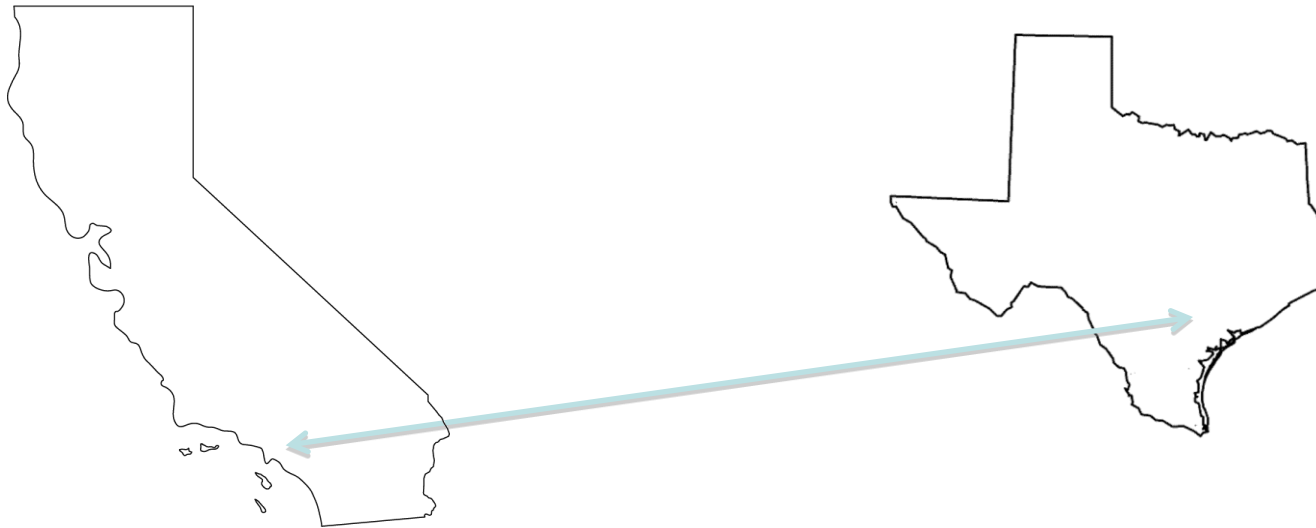
Some Lessons Learned



- WOWs
 - Consider a refresh of carts with better battery management
 - Look for outlets
 - Need help from vendor for remote battery monitoring
- Outward communication (to clinicians) important
 - Do not underestimate communication regarding single sign on – it's surprisingly un-intuitive
 - Difficult to explain that a computing appliance is NOT a computer
 - Consider special assignments on different computers (e.g., training applications)
- Single sign-on through MSO but co-signing for medications not the same!
- Exposes dependence on wireless
 - Wired Workstations in rooms
 - Improved workstation performance
 - Address initiative for bedside charting
 - Streamline medication admin
 - Safer when using isolation rooms
 - Leverage "tap and go"

Story 3: Disaster Recovery ...

- EMC Recover point
 - Continuous replication over secure tunnel
 - Approximate 2 hr RTO/RPO
 - First test achieved 3 hrs.
 - Hosting partner in San Antonio
 - Long term plan to move closer



Disaster Recovery

- The conundrum of what to include
 - Core HIS
 - “Eco-system apps”
- Keep adding means co-location
- Co-location means “Cloud”



- Flip to “DR mode”, but don’t flip back
- Current projects:
 - Network refresh
 - Absolute redundancy
 - Dual high speed fiber links outbound
 - Multiple paths on campus
 - LAN/WAN and Wireless optimization
- With clinical adoption gains, less tolerance for anything but high availability



What's next?

(or, I wish I had all the answers)

- Continued EMR/MU Actions
 - Specific niche application integration
- Migration of infrastructure to Cloud services
 - In the right order, with minimal risk
- Ambulatory Clinics
- Analytics and Data
 - Governance
 - Tools
- Plugging into the innovation landscape
 - “API’s”
 - Smart telemedicine
 - Communications



Thank you

Questions?

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