

# Linking Hospitals to Physicians through HIT

Stephanie R. Olivier, MBA Director, Regional IT Infrastructure



# **Sutter Health System**

- Located in Northern California / Hawaii
- 28 Hospitals, 7 Medical Foundations, & 27 other Business units serving more than 100 communities
- Physician Services organizationSutter Connect"
- 41,000 employee's
- 5,000 aligned Physicians
- 1 % of all USA Births in Sutter Health Hospitals
- Over 5,000 licensed Beds
- \$ 5.6 Billion 2003 Net Revenue



# **Sutter System Support IT**

- 950 IT FTE's (Enterprise)
- 425 IT FTE's (Corporate)
- New "world class" Data Center
- "ASP" model to all sites
- Full Installation Teams
- Full Interface Teams
- Web Teams
- "Hacker" Team



# **Sutter IT Recognition**

- Business Week named Sutter one of the nations "Web Smart 50" in recognition of eICU
- Computerworld recently recognized Sutter in the top 50 "Best Places to Work in IT"
- Hospitals and Health Networks magazine recognized Sutter as one of the nation's "100 Most Wired Health Systems" in 2003
- Information Week recognized Sutter on its "Top 500" list for most innovative use of IT

### **Enterprise-wide IT House**

- Enterprise Master Person Index and Common/Enterprise Scheduling
  - SHEW
- Clinical/Case Management and Outcomes Reporting (Health Status, Health Risk, Patient Satisfaction, Clinical Results)
  - Clinical Decision Support
- Protocols/Guidelines
- Rules-based Order Entry

**Integrated Patient Care at the Regional Level** 

**Clinician View, Patient View (MY CHART)** 

### **Data Model and Standards**

### **Patient Care In-Patient**

**Nursing/Documentation, Electronic Medical Record** 

**Communications Between Ancillaries / Nursing/Billing** 

Order Entry and Results Reporting (SHIPER & EPIC WEB)

**Clinical Department Workflow and Billing** 

Laboratory & Radiology (SunQuest), RX, Niche Depts, Transcription

### **Transaction Systems to Support Billing**

ADT/REG(MS4), Medical Records(MS4), Patient Accounting(MS4), Financial Decision Support System (TSI), Regulatory Compliance, Contract Mgmt, Eligibility/Referral Mgmt(MS4/HDX), Managed Care

### **Patient Care Ambulatory**

Clinical Documentation, Electronic Medical Record (EPIC)

**Communications Between Ancillaries/Offices/Billing** 

Order Entry and Results Reporting (EPIC & EPIC WEB)

**Clinical Department Workflow and Billing** 

Laboratory & Radiology (SunQuest), Transcription,
Niche Depts

### **Transaction Systems to Support Billing**

Physician Practice Mgmt(IDX), Managed Care, Contract Mgmt, Eligibility/Referral Mgmt

Technical Infrastructure IDX Lawson Data Standards IT Value Web Enabled Apps
Project Management IT Cost Containment Reporting Links Security



### **Sutter Commitment**

### **Quality Care and Error Reduction**

- \$50 million investment
  - First on West Coast to provide 24 x7 remote monitoring of ICU beds
  - Bedside Medication Administration with bar-coding technology
- \$151 million investment towards an integrated inpatient/outpatient EMR
- Formal, coordinated, goal-oriented initiatives to improve patient care



### **Other Clinical Investments**

- Enterprise-wide MPI
- Data Standardization initiative
- Clinical Data Repository
- Sutter Health Institute for Research & Education (SHIRE) "Outcomes Research"
- High-availability infrastructure



# **Physician HIT Strategy**

- Create value for physicians and patients by providing real-time clinical data
  - ▶ EMR Epic strategy for Foundation offices
  - Portal strategy for independent physicians
- Goal is to provide a unique service that presents better information than currently available
- Develop a network of connected physicians



# Physician HIT Strategy continued...

### **Ancillary benefits include:**

- Reduction of paperwork
- Reduction of errors
- Improved communication
- HIPAA compliant sharing of demographic and clinical data



# **Foundation Physicians**

- Strategy is much clearer when there are no inurement issues
- Four Foundations within Sutter are on EpicCare outpatient EMR
- 5,065 Active Users
- 1.5 million physician office visits annually
- 28,000 active Patient My-Chart users



# **Independent Physicians**

- Portal Strategy
- Physicians provide leadership in design and pilot
- Pilot at Mills Peninsula has been underway for one year
- Priorities for clinical functionality are driven by Physician Steering group



### **How to Organize? BAPSCI**

# Bay Area Physicians, Sutter Clinical Integration

- Formed in 2001
- Alliance of four IPAs, two medical groups within a foundation, and Sutter Health
- Exists to advance principles of clinical quality, service quality and technical innovation



### **Technical Overview**

- Developed with toolset from Park City Solutions
- SQL Server database to store Lab and Epic data
- Token authentication required for Internet access



### **Back Office**

- Eligibility
- Authorization
- Referrals
- Claims

Context Maz

### **Framework**

### **Results Reporting**

- Laboratory
- Radiology
- Transcription
- PACS

### Single SignOn

### **Identity Management**

- Physician
  - Patient

Row Based Acc

Employee

### noitoxilonozzag •

### Content Posting

- Report Distribution
- Document Sharing
- PDF's, Word, HTML
- Group Secure

### **Secure Messaging**

- Physician-to-Physician
- E-Consultation
- Physician-to-Patient

### **Advanced Clinicals**

- Utilization Mgmt
- Disease Mgmt
- Industry Measures
- SH Clinical Initiatives

### **Clinical Library**

- Medical Journals
- Nat'l Library of Med
- "Ovid-Like" Info
- HealthTech

### Core **Physician**

Core **Portal** 

**April 2004** 



# **Physician Portal Goals**

# Complete portal envisioned to include the following functionality:

- Results Reporting
- Content Posting
- Advanced Clinicals
- Clinical Library
- Single Sign-On & Identity Management
- Secure Messaging



# **New Functionality**

- Clinical Library Pilot
- Dictaphone Medical Transcription
- PACS
- Outlook Email
- Epic Web
- Sutter Connect Online
- Document Management



# **Challenges to Portal Strategy**

- Providing unique information that will draw physicians to the site
- Standard systems: 70% of Sutter is on a common lab system but the 30% are a problem
- Overcoming competitive views of data standardization
- Inurement concerns



# Challenges continued...

### Physician requests for data interfaces

- Have attempted compromise when requests have been made
- Policy has been not to do interfaces where possible: too costly, inefficient, and may lead to errors
- Ultimate goal is integration between physician groups and between the group and hospital; interfaces won't get us there



# **Have to Recognize**

- Product has to add value to what physicians already have
- It takes time to be successful
- Live with the slow adoption curve
- It will be slow at the beginning, but there is a tipping point when interest increases quickly



# **Hospital/Physician HIT Pressures**

Pressures are mounting for full integration of workflow, e.g. orders and pharmacy management

National Initiatives - RHIO Questions remain such as how will we meet public policy initiatives to improve information flow without an IT safe harbor

**Funding** 



# **Questions?**



### **Presented by:**

# Stephanie R. Olivier, MBA

**Director, Regional IT Infrastructure Sutter Health** 

916.454.8806 OFFICE

916.503.3788 FAX

oliviers@sutterhealth.org