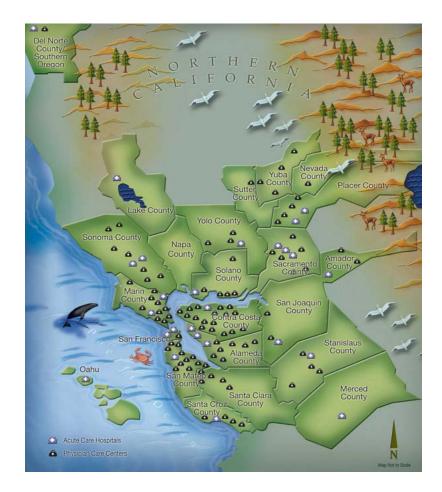
Sutter Health: Linking Information Technology and Chronic Care Delivery

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Sutter Health – A Snapshot

- 27 acute care hospitals
- 3,400 physicians (7 physician medical foundations)
- Approximately 40,000 employees
- \$5.7 billion in revenues (2003)
- \$5 billion in assets (2003)
- Home health & hospice, and long-term care services
- Medical research and medical education/training



Information Technology and Patient Safety

August 2002:

Sutter announced \$50 million investment for breakthrough technology to raise the bar on ICU and medication delivery

– eICU – eMAP





- Sutter Health is the first on the west coast to use technology from the Baltimore-based VICISU inc.
- Telemedicine technology for ICU patients using advanced video and electronic monitoring to connect off-site critical care specialists
- Enables Sutter Health to extend intensivist skills to more than 400 ICU beds through the hospital network
- Provides an early warning system for patient care, resulting in improved clinical outcomes

Medication Administration - eMAP

- Sutter Health is the first health care system in California to implement such a system
- Utilizes Bridge Med Point[™] computer bar-coding soft ware that links patient armband, medication, medication order and administering nurse at the time of med administration.
- Sutter's early audit has shown more than 2000 potential med errors were prevented (out of 2.6m attempted drug administrations)
- Sutter will complete installation of the program in all 26 hospitals in early 2006

Electronic Health Record

Sacramento Oct 28, 2004:

Sutter Health will implement the nation's most advanced electronic health record with patient access by 2006.

"Our EHR will be one of the most comprehensive and patient centric systems ever implemented in the United States...physicians and other professionals across our network will be able to better coordinate care through immediate online access to secure medical and patient data, including radiology, lab and pharmacy results. Just as important, patient will be able to view their personal health records and interact online with their physicians."

John Hummel, Sutter Health SVP and CIO

Electronic Health Record

- Sutter has selected Wisconsin-based Epic Systems corporation as its partner for EHR
- \$154 million in capital outlay, Including the \$7 million already expended in support of the Foundations
- Current Ambulatory EMR (Epic) employed in Palo Alto, Sutter Gould and Sutter Medical Foundation; representing 700 physicians

Electronic Health Record

- Instillation of inpatient EHR will begin in July 2005 (standards development to begin in January)
 - Sutter Medical Center (Sacramento)
 - California Pacific Medical Center (San Francisco.)
 - Alta Bates Summit Medical Center (Oakland)
- Comprehensive integration of in-patient, out-patient, ED, lab, radiology, medication histories
- EpicLink will be made available to those physicians not on Epic as the hospitals "go-live"
- Improved access and care for the millions of patients served by Sutter Health and improved integration of information for the more than 5,000 Sutter-aligned physicians

Using Technology to Improve Chronic Care Delivery

- Sutter Health Sacramento Sierra region has a nationally recognized care management program for persons with chronic illness (Sutter Chronic Care Program)
- Serves 2000 patients annually in the greater Sacramento area
- Connected to PCPs (in the Sutter Medical Foundation) and ambulatory case managers via Epic
 - access to patient clinical histories
 - Case managers report to PCP re: interventions
 - Ability to track specific outcomes

Using Technology to Improve Chronic Care Delivery

- Epic as basis for patient registry in Diabetes program (Sutter West Medical Group and Sutter Medical Group – Laguna FP)
- Epic interface is essential for SHSSR Anticoagulation Program
 - Tracking labs
 - Tracking medications
 - Reporting changes to physician



Using Technology to Improve Chronic Care Delivery: Next Steps

- Utilize DxCG RiskSmart[™] for predictive modeling for managed care claims data
 - Development of condition-specific population registries to support disease management
 - Ability to create high-risk patient reports, based on predetermined parameters
 - Develop risk-tiers within specific conditions
- Expand chronic disease case management by including Telemetric monitoring for specific chronic disease group, as defined by risk-tiers. (currently in vendor assessment phase)

Why does Sutter invest in IT?

- Improved patient safety clearly linked to IT (Leapfrog initiative)
- Desire to differentiate Sutter Health throughout Northern California, and the U.S.
- Ability to scale already proven chronic disease care management programs to large populations
- Need for payors and employers to work with Sutter Health as a system, rather than 10-20 local pilots and programs

A bright future for IT and improved chronic care delivery at Sutter

