The Western Nebraska Health Information Exchange

Daniel Griess
Western Nebraska Health Information Exchange

Harold Krueger
Rural Nebraska Healthcare Network

This project is supported by grant numbers 1 UC1 HS016143 (Implementation) from the Agency for Healthcare Research and Quality and D06RH06884-01-00 from the Office of Rural Health Policy

Vision for a Regional Health Information Exchange

VISION

A sustainable system of healthcare for the region developed through collaboration and cooperation which respects the autonomy of partners.

MISSION

Enhance patient safety quality of care through the effective exchange of health information among all providers and partners.

Successful RHIOs

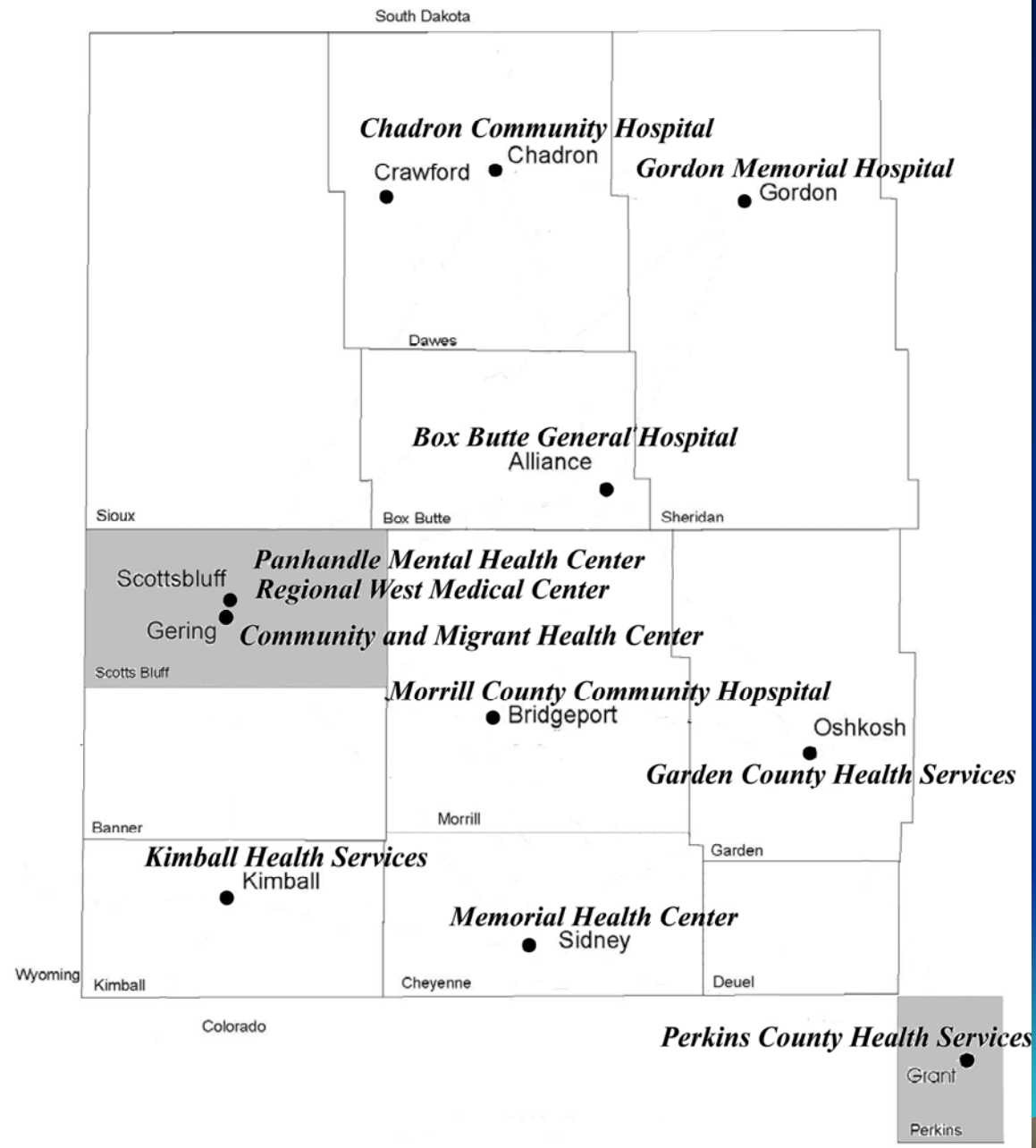
- Focus on Quality Improvement and patient safety
- Focus on Outcomes and Performance (not just implementation milestones)

Selecting Our Priorities – Decision Points

- Value for partners
- Tie into legacy systems
- Technological ease
- Cost-efficiency
- Minimize disruption to workflows
- Minimize time to implement

Priorities

- Portal access
- Global Patient Index
- Electronic Health Records information
- Labs and integrated results management
- e-Prescribing/CPOE
- Syndromic surveillance



Partners

Rural Nebraska Healthcare Network and its members

- Box Butte General Hospital
- Chadron Community Hospital
- Garden County Health Services
- Gordon Memorial Hospital
- Kimball Health Services
- Memorial Health Center
- Morrill County Community Hospital
- Perkins County Health Services
- Regional West Medical Center

Panhandle Community Services Health Clinic

Panhandle Mental Health Center

Panhandle Public Health District

Building On Successes – *Previous Practice/Norms*

- **National Rural Health Association's 2005 Outstanding Organization of the Year**
- Active Information Technology Team – savings approximately $100,000
- Creation of Cross Training Local Crisis Response Teams - 33% decrease in Regional Emergency Protective Custody and cost savings of approximately $470,000
- Medication Management Clinic - reduction in emergency protective custody and hospitalization of persons with SPMI, with cost savings of approximately $200,000
- Free home nursing visitations for area newborns
- Prescription medications at three pilot hospitals – approximately $100,000 savings

Logical Starting Point
(…But Not Our Ending Point!)

- CEOs had vision
- System of care in their communities
- Hospital care (in-patient only) accounts for 1/3 of the nation's health expenditures.*

Girosi, F., Meili, R., & Scoville, R. (2005) Extrapolating evidence of health information technology savings and costs. RAND Health. From http://www.rand.org/pubs/monographs/2005/RAND_MG410.pdf

Major Issue Areas

- Architecture
- Technology/Connectivity
- Data/Information Semantics
- Varying Organizational Cultures
- Patient Information Privacy & Security
- Other Legal Issues
- Financial
- Organizational Structure
- Collaborative Development
- Capacity Building
- Communicating the “Message”
- Working with Vendors

Technological

- Widely varying levels of sophistication and of products!

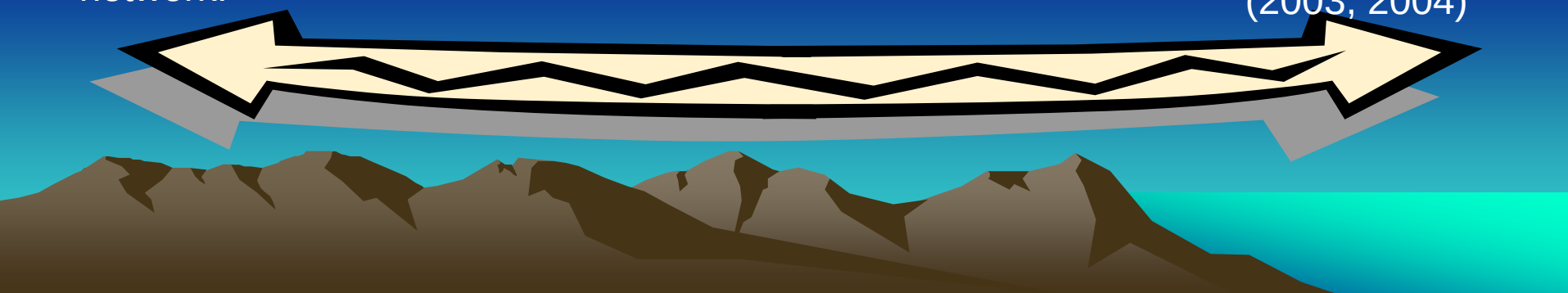
3 hospitals - No EHRs, no computers at key work sites, no functional network.

Clinic-only EHR

1 Physician-designed – not interoperable

1- CPSI
1 - Dairyland

Regional West Medical Center – McKesson Most Wired Rural Hospital (2003, 2004)



Organizational Culture

- Sharing of health information is a fundamental change in the culture of most institutions
  - Other providers are competition
  - Health information is to be protected not shared
  - The hospital “owns” the record
- Disrupts workflow and the way things are done

Provider Concerns

- Electronic health records will get in the way of patient care*
  - Patient-doctor relationship – physical barrier
  - Time and workflow adjustments - yet another demand in a busy workday

*The Markle Foundation. July 2004. Connecting Americans to their healthcare: Final report. http://www.connectingforhealth.org/resources/wg_eis_final_report_0704.pdf

Financial – Rural Issues

- Lack of access to capital for investment
- Inability to access high-quality IT services at affordable prices
- Evidence for return on investment not clear

Rationale for Collaborative Development

Each organization needed to **understand** and **embrace** and **execute** the possibilities of health information exchange

- Independent, autonomous organizations
- Commitment of scare resources (e.g., funds and staff)
- Changes in workflows, policies & procedures
- Inevitable problems
- Long-term commitment
- Build TRUST among participants

Capacity Building

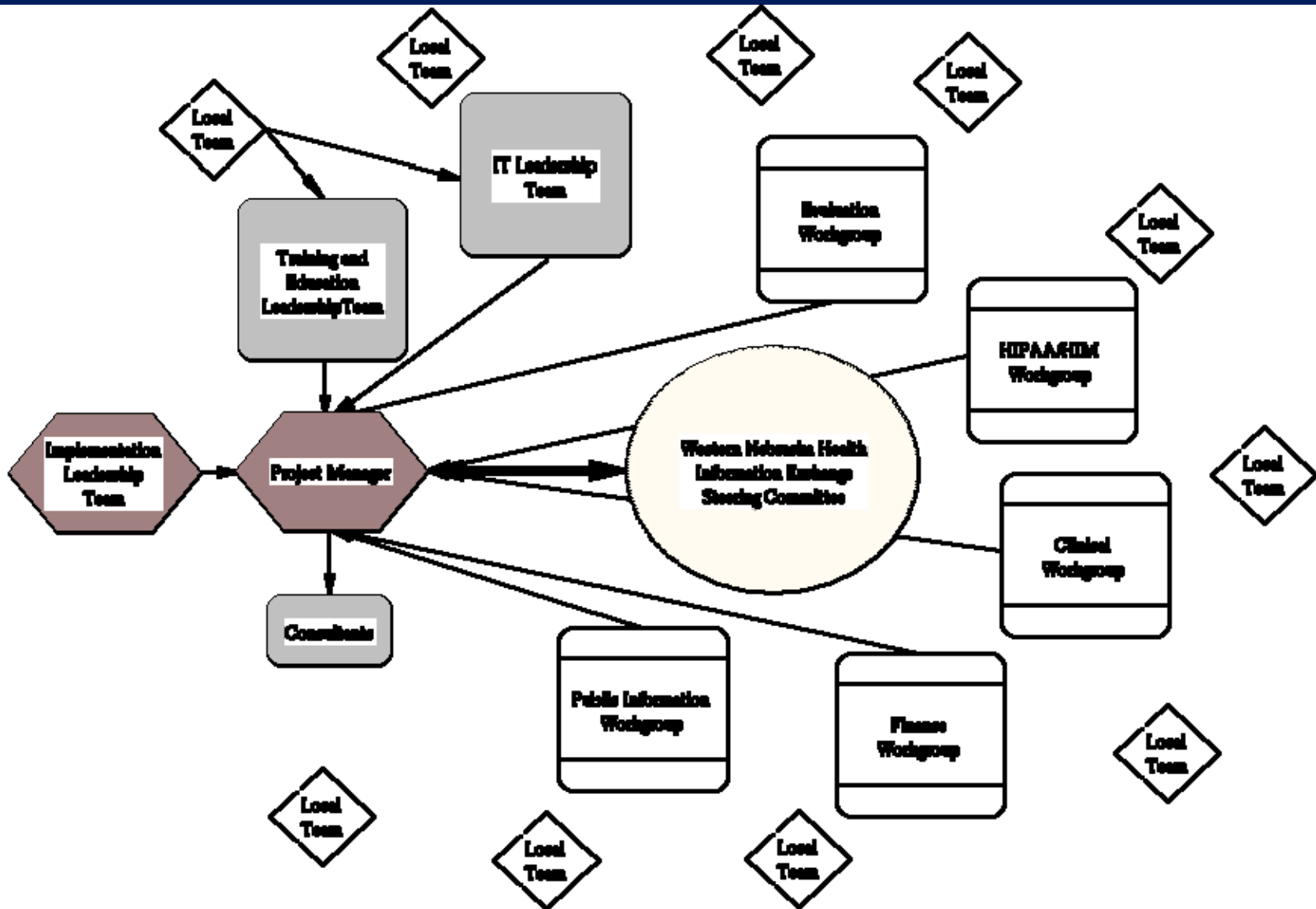
- Teams and Workgroups that are learning as they develop our vision
- Regional Teams meeting
- Trainings
  - Convened Regional
  - Developed for partner organizations
  - Attended national conferences
- Using consultants: AHRQ TA, private, other HIEs, WNCC

High Impact Capacity-Building Trainings

- Overall vision and components: CPEHR, CPHIT
- Workflow Change and Processes: Change Management, Facilitation, Project Management
- EMRs: Vendor Selection
- Computer Skills: Windows, Excel, User-training
- HIE: Portal Training (current) and for each new product
- Local Consultations: Migration Path planning and project planning

Arranging CEUs and credit through WNCC!

Organizational Structure



Our Progress

- Released RFP for the technology that will match patients and interoperate between organizations' EMRs and other data sources on July 23 to 8 vendors
- Created an LLC with the RNHN as the single member to be the legal entity
- Hybrid moving to centralized architecture
- Opt-out option for patient privacy requests
- Vendor Selection Team formed
- Vendor Procurement Agreement
- User Agreements to access data

What we think we're learning

- Only a few HIEs are operational and these have been years in the making
- It is hard work
- Things will go wrong
- Focus on quality
- Physician buy-in is crucial
- Must create value-added for participating organizations
- Very hard work that requires lots of time and negotiation
- Incremental steps: low-hanging fruit, one at a time
- Fundamental changes in workflow and culture
- Need to constantly assess who needs to be at table and equip them to participate
- We have much to learn and yet to do!