



Small Town Healthcare Gets Wired!

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- New Facility 2003, hospital and clinic, Aitkin, MN
 - One satellite in McGregor, 25 miles away
- 42 clinic exam rooms with 27,000 annual visits

- 25 bed hospital, 1,300 inpatients per year
- 1800 Surgical procedures per year
- 8,000 volume ED per year
- 4 million dollar expansion for outpatient services in progress



Riverwood

HEALTHCARE CENTER



10 km
5 mi

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- 9 FP's, 1 IM, 4 ED MD's, 4 NP's, 1 PA
- Share 4 General Surgeon's, 2 Ortho's, and 2 OB/GYN's with Crosby
- Over 20 Specialty Physicians from outside clinics

E-Health: What are we doing?

- Meditech
 - Full integration throughout entire facility
 - » Two clinics, hospital, ED, all departments
 - **Central repository to gather and store information across the organization**
 - Administrative functions
 - » General financials, Revenue Management, Decision Support, Billing
 - Patient care management
 - HIS

E-Health: What are we doing?

- Meditech
 - Inpatient
 - Pharmacy, MAR to Omnicell
 - Scheduling, ordering
 - Imaging
 - Laboratory, full integration
 - Integration of send out labs from Specialty Labs
 - Dietary

E-Health: What are we doing?

Video conferencing

- Between clinics and hospital and outside organizations
- Tele-health for Dermatology
- Intra-operative video conferencing

E-Health: What are we doing?

– Ambulatory charting

- **Scheduling**

- **Full data capture.**

- Review progress notes, vitals, medication record, problem list, phone calls
- Review/access to all labs and radiology from across the organization!
 - » Inpatient, ED, and outpatient.
- Review inpatient documentation of H&P's, D/C summaries, Operative reports, Pre-op/intra-op/post-op nursing documentation, Medications administered as inpatient.
- Review therapy and other ancillary services documentation

- **Physician ordering**

- Laboratory, Imaging, Therapy, Procedures.
- Prescription Management
 - » Direct faxing to pharmacy from exam room
 - » Drug interaction, contraindication, dose checking
 - » Automatic management of drug list

E-Health: What are we doing?

– Ambulatory charting

- **Results management**

- Review and manage lab and imaging results
- Letter generation to patients

- **Messaging**

- Management of patient messages, phone calls
- Electronic communication between front desk, nurse and provider

- **Task management**

- Phone messages
- Results
- Review and sign all documentation
- Review and sign labs/x-rays





Improved Outcomes?

- No current data
- Yes, we believe we will have better outcomes
 - Patients like instant review of results
 - No loss of data
 - Improved decision making
 - No duplication of services
 - Less time searching, spinning your wheels
 - Instant access across organization
 - Central source of data
 - Instant updating of data

How did we get here?

- Administration and Board
 - Must have full support
 - Money!!
 - Resources
 - 1.5 FTE's for outpatient
 - 1 FTE's for inpatient
 - Infrastructure
 - In our organization
 - » 221 computers
 - » 136 printers
 - » 75 Citrix terminals
 - Redundant High Speed Lines
 - Education
 - Computer Lab



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How did we get here?

- Vision and depth in IT
 - SISU Medical Systems, Duluth MN
 - Services 13 hospitals in Northeastern Minnesota
 - Approx 40 employees
 - Critical for small hospitals to have access to a broad depth and vision of technology to manage complicated systems!!
 - Sophistication only available to large organizations
 - Buying power
 - Cost sharing

Where do we go from here?

- Future!!
 - **Health maintenance**
 - Auto-generated reminders/orders based on demographics
 - **Disease Management**
 - Auto-generated reminders/orders based on disease
 - **PACS integration**
 - **Inpatient management**
 - Bedside medication verification
 - Nursing documentation
 - Full integration with outpatient data
 - **Emergency Department**
 - **Document Imaging and Scanning**
 - **Statistics Gathering with Improved Outcomes Planning and Management**

What have we learned?

- Plan, Plan, Plan
 - Organizational approach
 - Outline goals with realistic timelines
 - Involve all departments in the decision making process
 - Infrastructure
- Go slow, **PATIENCE!!!!!!**
- Quick Victories
- Don't underestimate training needs
- Think about the emotional reaction
 - New way to problem solve and think
 - Change, Loss
 - Re-process previous problems
 - Plan for frustration

Thank You
Medical



What have we learned?

- Don't lose sight of what's important

- **Good Patient Care!!!!**

