

# ELECTRONIC LABORATORY RESULTS DELIVERY FROM HEALDSBURG DISTRICT HOSPITAL



November 21, 2008



ALLIANCE MEDICAL CENTER  
*Clinica Alianza*

**Will Ross**  
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**Mark Street**  
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*Chief Executive Officer -- Healdsburg District Hospital*

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*Quality Improvement Coordinator -- Alliance Medical Center*

**Carl Henning, MD**

*President -- Redwood MedNet*

**Michael Hogarth, MD**

*Associate Professor -- Department of Pathology & Laboratory Medicine -- UC Davis School of Medicine*

**Mark Street**

*Chief Technology Officer -- Alliance Medical Center*

**Will Ross**

*Project Manager -- Redwood MedNet*



We know  
Healdsburg District Hospital....



**ALLIANCE MEDICAL CENTER**  
*Clinica Alianza*

....and we know  
Alliance Medical Center....



....but what is Redwood MedNet?

# QUESTIONS

1. **What is Redwood MedNet?**
2. **What is a health information exchange?**
3. **What is the value of health information exchange? (Or, how can healthcare afford another expense?)**
4. **What is the Redwood MedNet business model?**
5. **Is the Redwood MedNet electronic health data secure?**
6. **How does a practice sign up for the electronic laboratory results delivery service?**

# WHAT IS REDWOOD MEDNET?

A community based non-profit health information exchange.

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# GENEROUS FUNDERS

blue shield  
of california  
foundation



CALIFORNIA  
HEALTHCARE  
FOUNDATION



# BOARD OF DIRECTORS

- **Mark Apfel, MD** -- *Medical Director, FQHC*
- **Peter Cho, MD** -- *Family Practice*
- **Andrew Coren, MD** -- *Family Practice*
- **Carl Henning, MD** -- *Surgeon, Group Practice*
- **Jeff King** -- *Executive Director, FQHC*
- **Tom Reidenbach, PharmD** -- *Pharmacist*
- **Robert Rushton, MD** -- *Family Practice*
- **Marvin Trotter, MD** -- *Health Officer, County Public Health*
- **Mark Turner** -- *IS Coordinator, Rural Hospital*

# OPERATIONS TEAM

- **Will Ross** -- *Project Manager*
- **Lori Hack, MBA** -- *Privacy Advisor*
- **Gary Teichrow** -- *Technology Advisor*
- **Michael Hogarth, MD** -- *Health Informatics Advisor*



# ORGANIZATION CHART

## Board of Directors

### Operations Committee

1. Will Ross
2. Mark Street
3. Michael Hogarth, MD
4. *(your name here?)*

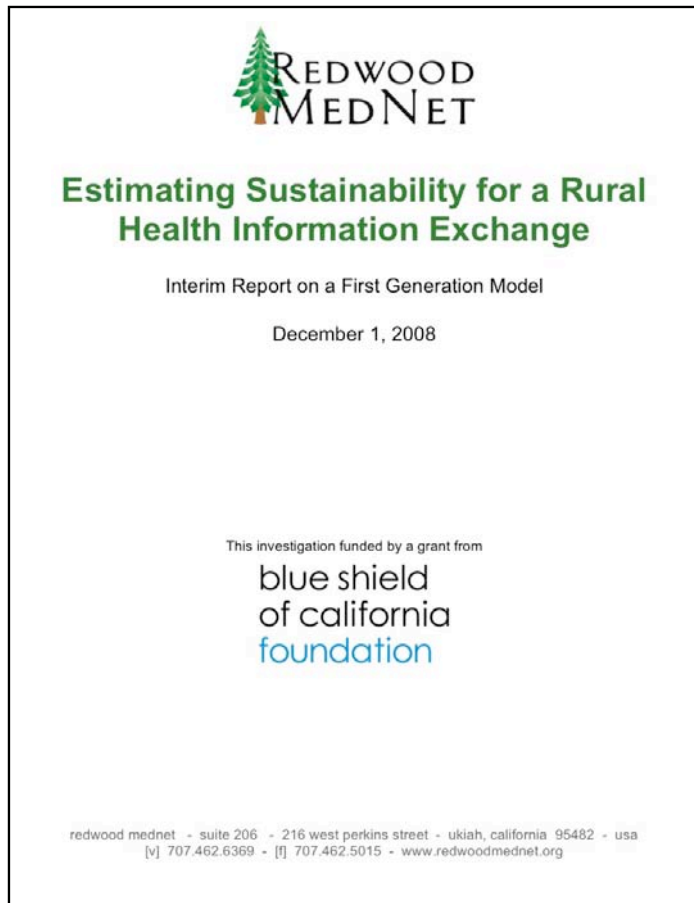
### Technology Committee

1. Will Ross
2. Mark Street
3. Michael Hogarth, MD
4. Gary Teichrow
5. *(your name here?)*

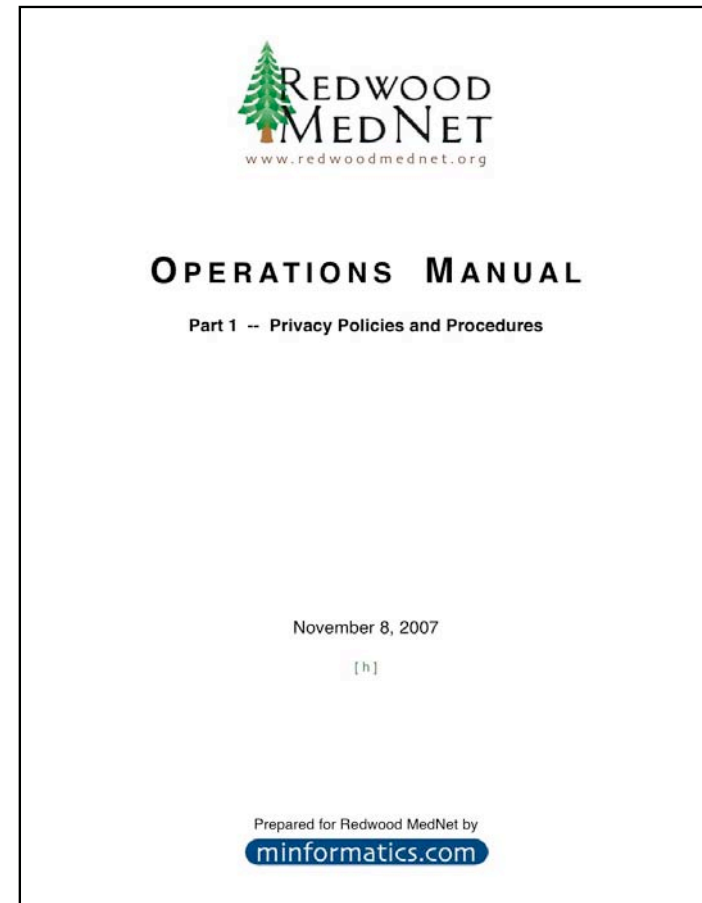
### Privacy Committee

1. Will Ross
2. Lori Hack
3. Gary Teichrow
4. Marvin Trotter, MD
5. *(your name here?)*

# BUSINESS PLAN



# OPERATIONS MANUAL



# WHAT IS REDWOOD MEDNET?

A community based non-profit health information exchange.

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# WHAT IS A HEALTH INFORMATION EXCHANGE?

A secure data service that utilizes nationally recognized standards to provision the electronic movement of clinical information among separate health care organizations.

# WHAT DOES A HEALTH INFORMATION EXCHANGE DO?

Makes electronic clinical data agile and available to improve patient care.

# WHAT IS THE VALUE OF HEALTH INFORMATION EXCHANGE?

Assembles a unified patient record by pulling clinical detail from multiple care delivery sites

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Assembles a unified patient record by pulling clinical detail from multiple care delivery sites

## **Savings of \$26 per Emergency Department encounter**

“A Randomized Control Trial of Clinical Information Shared From Another Institution.” Overhage, Dexter, Perkins, et al., *Annals of Emergency Medicine*, vol.39, no.1, January 2002.

# WHY IS REDWOOD MEDNET DELIVERING ELECTRONIC LABORATORY RESULTS?

Because it is the first step towards building a health information exchange.



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Because it is the first step towards building a health information exchange.

1. **Laboratory Results**
2. **Radiology Reports**
3. **Medication History**
4. **Discharge Summaries**

# WHY IS REDWOOD MEDNET DELIVERING ELECTRONIC LABORATORY RESULTS?

And also because:

1. It improves laboratory efficiency at the hospital
2. It improves the medical records work flow for individual practices ordering laboratory tests
3. It improves the ability of the local clinical community to adopt electronic health records

# WHAT IS THE REDWOOD MEDNET BUSINESS PLAN?

- ✓ 1. Leverage grant funds to start the service

*Blue Shield of California Foundation, \$253,000*

*United Healthcare/PacifiCare, \$361,000*

*California HealthCare Foundation \$74,000*

2. Grow the service to a minimum size ( $n = 500?$ )
3. Switch to a subscription model (*transactional fees for data services*)

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**Next iteration of business plan will be published on December 1, 2008**

# IS THE REDWOOD MEDNET HEALTH DATA SECURE?

1. Federated data topology
2. VPN circuits for data acquisition
3. VPN circuits for private delivery (*push*)
4. SSL sessions for public portal access (*pull*)
5. Three factor authentication for user login to portal

**Currently using two factor authentication, transitioning to three factor authentication in December**

# HOW DOES A PRACTICE SIGN UP FOR THE REDWOOD MEDNET HEALTH DATA DELIVERY SERVICE?

1. Business Associate Agreement (*HIPAA*)
2. User Signup Form
3. Participation Agreement (*contract*)
4. Volunteer for Committees

*Operations*

*Technology*

*Privacy*

# REDWOOD MEDNET FOLDER

1. Business Associate Agreement (*sample*)
2. User Signup Form
3. Participation Agreement (*contract*)
4. Redwood MedNet Organization Chart
5. Minutes from Board of Directors meeting
6. Minutes from Operations Committee meeting
7. Minutes from Technology Committee meeting
8. Redwood MedNet Operations Manual (*Privacy Policies*)
9. “A Few Years of Magical Thinking” by Diamond & Shirky

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