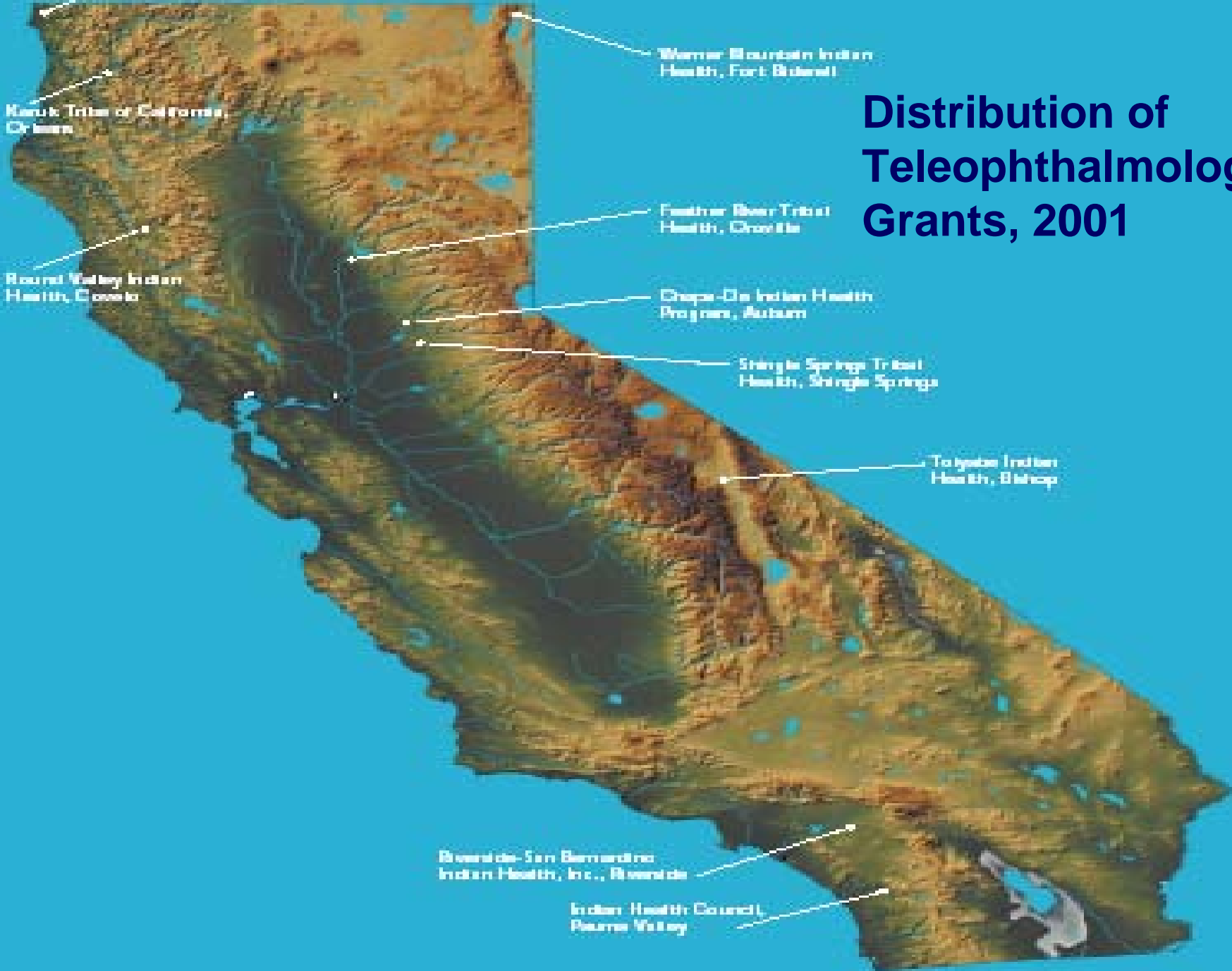


Rural Challenges in Implementing Telecommunications for Healthcare

- **Earl W. Ferguson, M.D., Ph.D.**
- **Cardiologist, Southern Sierra Medical Clinic, Ridgecrest, California**
- **Advisory Committee, California Telemedicine & eHealth Center**
- **(760) 371-5088, EW Ferguson@starband.net**
- **(760) 446-6404, www.ssmc.ridgecrest.ca.us**

Distribution of Teleophthalmology Grants, 2001



Problem

- Large, sparsely populated area isolated by the southern Sierra mountain range
 - 18,000 sq mi, 12% of California
 - Only 134,000 people
- Lack of critical sub-specialty care
- Lack of information resources for healthcare and consultation

Telemedicine Evolution

- From Telemedicine:
 - Real-time Interactive Video
 - Dedicated “studio” systems
 - Dedicated, telecommunications lines
- To Telehealth/Telemedicine:
 - Medical informatics
 - Store-and-forward consultations
 - Desk top/portable computer systems
 - Internet/Intranet/Extranet applications

Vision

- Seamless digital integration of
 1. Electronic medical records, including laboratory results and diagnostic images,
 2. Medical practice management (scheduling, provision of care, billing, etc.),
 3. Telemedicine and e-health applications, and
 4. Smart decision support systemsto maximize clinical outcomes anywhere and anytime.

The Challenges

- Assessing Community Needs
- “Selling” Information Technologies (IT)
- Selecting the Appropriate IT
- Funding
- Implement the System
- Local Provider “Buy-In”
- Consultants
- Sustainability

Assessing Community Needs

- Community Health Council
- Hospital Community Needs Assessment Committee
- Needs Assessment Process
 - GIS data from State
 - Program Project Planning Grants

“Selling” Information Technologies as a Solution for Community Needs

- Hospitals
 - Need to collect and report data
- Providers/Clinics
 - How do I fit this into an already busy clinical practice?
 - How do I fit this into the business aspects of my practice?
 - How will it affect my bottom line?

Selecting the Appropriate IT

- Hospitals
 - Financial/Accounting
 - Laboratory systems/reports/orders
 - Pharmacy
 - Physician Order Entry
 - PACS
 - Electronic Medical Records (EMRs)
- Provider Clinics

Funding

- Hospital/Clinic
 - Electronic billing speeds reimbursement
- Grants
 - Telemedicine
 - eHealth/NLM
 - Home Health

Implement the System

- Solve the technical issues (continuous process)
- Set up Policies and Procedures
- Train all ancillary personnel
- Test, Assess and Adjust
- When it's working reliably – involve providers

Local Provider “Buy-In”

- Get a “Clinical Champion”
- Find out what Provider needs are and work with them to meet those needs
 - What are current referral patterns?
 - What are unmet needs?

Consultants

- Insure the system is reliable
 - Test, test, test/re-test, re-test, re-test
- Make the system easy to use
 - Proximity to consultant
 - Telemedicine Coordinator
 - Nurse
- **Understand the Consultant's Practice!**

Sustainability

- How does the system pay for itself?

Implementation Tasks

1. Standards

Digital standards, a common language

2. Policy

Security, Access, Privacy

3. Legislation

To support, encourage, and not hinder the transition process

4. Reimbursement

To encourage and direct implementation of system

Vision

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New Rules, New Roles for Healthcare Providers

- Implications for Success:
 - information technology
 - standardization, quality
 - retail strategies -- embrace the Internet
 - transfer knowledge and best practices
 - highly selective investment strategies
 - customer focus
 - THE REAL CONTROL POINT IN HEALTHCARE

“May you live in
challenging times.”

-- Old Chinese Curse

“We’re surrounded by
insurmountable
opportunity!”

--
Pogo