

Vox² Healthcare

eHealthcare ~ Rural Telemedicine

Case Study: Community Healthnet



Topics for Discussion

- HIPAA
- Satellite Benefits
- **DVB-RCS** Satellite System
- Community HealthNet
- Connecting
 - Data Transfer
 - Video Stream
 - Telemedicine
 - Web-ASP
 - Web-EMR
- Benefits



HIPAA Compliance

- Security and Privacy Compliance is complex & costly.
- eBilling and Telemedicine initiatives must adhere to standards and rules



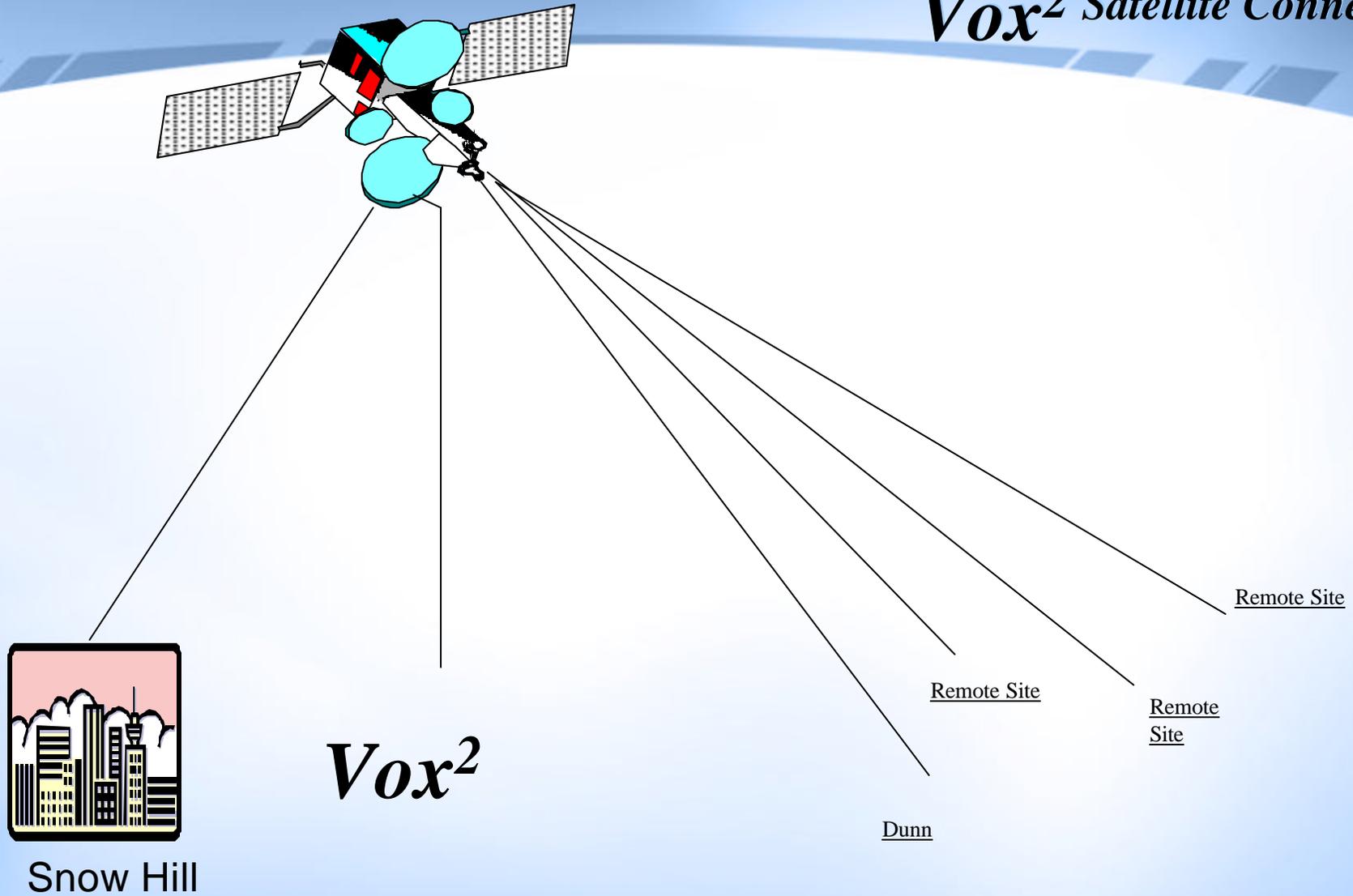
Satellite Benefits



- **Vox²_{VPN}** proprietary “connectivity” patent:
- **Designed for Rural Healthcare**
 1. Allows for High Speed Broadband
 2. Private Network
 3. Not “simple” Internet pipe
 4. Fast & Secure Data Transfer, Video & VoIP
 5. Allows for hybrid telcom solution

Total Package: seamless & paperless

Greene County: Community Health Centers *Vox² Satellite Connection*



DVB-RCS

The World's First Two-way Open Standard



- Offers the first Open Standards Broadband Satellite Network :

- Provides interconnection between users who are exchanging real-time applications based on several data types (e.g., text, voice, images, video)

- Fulfills need for bi-directional satellite communication.

- Creates opportunity for electronic communication 24/7

Satellite Hub

- DVB-RCS Inbound
- DVB-S Outbound
 - Up to 45Mbps
 - Up to 2Mbps
- Available in all frequency bands
 - C, Ku, Ka
- Operates on SHARED bandwidth
- Affordable & OPEN STANDARD



Data Transfer: EMR Motivation

- Email & Web browsing
- eBilling
- Cliniflow
- Authorizations
- Data Storage
- eRX – future application
- Inventory Management (Chain Supply for Pharmacy)
- Master Scheduling: multi-doctor/multi-location



Web-EMR

Web-EMR is suitable to be used with...

- Hospital to Clinic record management
- Multi-location ~ Multi-doctor applications
- Retail Pharmacy multi-location prescriptions
- Consultancy ~ Second opinions
- Second Language, International applications
- Migrant workers: state to state FQHC visits



Mr. Peter Paxton [Age: 49 years SSN: 764-62-4366]

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Demographics

Medical Information

Summary

Encounter

Date: Jan 22, 2004 Encounter type: Office/Outpt Visit, Est, Lvl III
 Time: 10:50 AM

Workflow Edit... Sign

Vital Signs:
 DS Rev. Problem F
 Review of Systems

Assessment
[429.2] Acute car

Encounter Builder (Mr. Peter Paxton)

Available Symptoms

Common Index Smart All

Search: Common

- Abdominal discomfort
- Anxiety
- Constipation
- Cough
- Diarhea
- Dry cough
- Earache
- Exquisite pain
- Headache
- Irritability
- Malaise
- Nausea and vomiting
- Normal bowel habits
- Pharyngeal pain

Patient Symptoms

MAIN COMPLAINT

- Anxiety
- Irritability
- Diarhea
- Constipation

Descriptors for Anxiety:

Norm./Abn	Nature/Type	Severity	Size
Duration	Location	Amount	Shape
Precip. by	Aggrav.by	Allev.by	Color
Frequency	Radiates to	Assoc.with	Status

Normal
 Abnormal
 N/A

Absent
 Present
 N/A

Acute
 Chronic
 N/A

Comment:

Subjective Objective Assessment Medication Plan

/ at least 12 leads;



James Paxton [Age: 3 years, 11 months SSN: 453-67-4536]

Demographics **Medical Information** Summary Encounter

- Medical
- Histories
- Medications
- Requests
- Specialties
- Screening & Prevention
- Programs (2)
- Questions & Recommendation:
- Immunizations (7)**
- Goal Monitoring

Immunizations Current

Vaccine	1	2	3	4	5	6	7	8
DTaP	Jul 04, 2000	Dec 20, 1999	Feb 21, 2000	Nov 21, 2000	Aug 21, 2003			
Hepatitis B - adolescent/pediatrics	Aug 22, 2000	Feb 03, 2000	Feb 21, 2001					
Hib, PRP-DMP conjugate (3 dose), intramuscular	Jul 04, 2000	Dec 20, 1999	Feb 21, 2001	Dec 07, 2000				
IPV	Jul 04, 2000	Dec 20, 1999	Feb 21, 2001					
MMR	Aug 24, 1999	Aug 22, 2003						
Pneumococcal	Jul 04, 2000	Dec 20, 1999	Aug 24, 2000	Dec 07, 2000				
Varicella	Feb 21, 2001							

Administered Missed Future Due

IMMUNIZATION

Hib, PRP-DMP conjugate (3 dose), intramuscular **No. 1 Active**

Date recommended: **Jul 04, 2000** Dose:

Date administered: **Jul 04, 2000** Exp date:

Administered by: **Young, Dr. Raphael**

Site administered: **Left Upper Arm**

Vaccine info: **TTP; 33490-A**

No reaction

Info sheet given: **No**

- Add...
- Edit...
- Delete
- Administer...
- Print...

Women's Health
Miscellaneous



Mr. Peter Paxton [Age: 49 years SSN: 764-62-4366]

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Demographics **Medical Information** Summary Encounter

Medical

- Problem List (4)
- Alerts (7)
- Allergies (5)
- Vital Signs & Statistics (17)
- Laboratory Results (1)
- Images (4)**
- Clinical Profile (3)
- Risk Profile (3)
- Nursing Care

Images Current

Date	Category	Name
Apr 12, 2000	Mri	MRI Head
Aug 16, 1999	CT Scan	CT-head
Apr 6, 1999	CT Scan	Kidneys
Jan 6, 1999	X-ray	X-ray Neck

- Histories
- Medications
- Requests
- Specialties
- Screening & Prevention
- Women's Health
- Miscellaneous



Date: **Apr 12, 2000**
 Name: **MRI Head**
 Category: **Mri**
 Comment:

- Add...
- Edit...
- Delete
- Open...
- Report

Video Stream Applications

1. CME: continuing medical education
2. Distance Learning
3. Video Conferencing
4. Virtual Consults/Telemedicine
5. Home Health Care with telemetry applications

Web-ASP: future applications



Web-ASP is a satellite application that many healthcare providers and payors are utilizing to provide connectivity solutions. It incorporates features from the following modules:

- Practice Management software (ASP)
- Billing and Management Reports
- Home Healthcare (ASP)
- Clinical Trial/Non-ambulatory patient interaction

Benefits

- Always-on, broadband connectivity for all locations.
- Cost-effective based on shared bandwidth
- Rapid deployment.
- Flexible and scalability – Open Standard
- Supports latest Satellite technologies.
- Continuous price/performance

Contact Us



Vox² continues to provide cutting edge technology for healthcare applications worldwide. We are excited to share our solutions with you:

To learn more about **Vox²**; contact:

Dr. Lori Zeller

lzeller@vox2healthcare.com