What is the “TeleDentistry Grant?”

- Brief History
- Grant Objectives

TeleDentistry: Improving Access to Dental Care

- 90% of low-income Floridians have NO access to dental care*
- UFCD Clinics: 80,000 patient visits annually; 11,400 visits for children living at or below 200% of poverty
- TeleDentistry can expand access through educational and clinical outreach

*Department of Health-Public Health Dental Program
TeleDentistry includes the addition of Digital Radiography to improve patient care.
TeleDentistry Grant Objectives

Improve IT infrastructure to:
- Expand distance learning capabilities (live interactive and web-based)
- Implement digital radiography
- Develop and evaluate clinical consultations using technology

Office of Information Systems

Godfrey Ovwigho, Ph.D.
Director, Information Systems
December 2004

Quality of Service

QoS

Email
Printing
Network - Internet
PCs
Shared Drives
eLearning

Website/ webpage
Other services
EL/Video Conferencing
Q/B - Billing, reports
Instructional support

Other services

Customer Service

Incidents/Calls
- Walk-in
- Phone
- Email
- Web
- Fax

Technical Service
- Office visit
- Site visit
- Phone Support
- Email Support
- Etc.

Feedback
- Email/Survey
- Questionnaire
- Communication

Technical Service

Office visit
Site visit
Phone Support
Email Support
Etc.

Staff Reorganization

Network & Servers
- Internet
- Shared drives
- Email
- Etc.

Clinical Financial Apps
- QR - patient info., Billing, reports
- Etc.

Web Services
- Website
- eLearning
- Video-Conference (DL)
- Instructional Support

Why IS Staff Reorganization?

TEAM S
- T = together
- E = everyone
- A = achieves
- M = maximum
- S = success
I. S. Infrastructure - Servers

- Email – GroupWise 6.5 – Server storage increased by 70%
- File & Print (NetWare 6.5) 120% storage increase.
- Quick Recovery – Medicor MiPACS activation. Storage will increase up to 1000%
- Web Server storage: 50%
- UPS: 30KVa
- A/C: 5 tons.

I. S. Infrastructure - Telecommunications

- JAX will remain at DS3 (45 mps).
- Hialeah: Full T1 (1.5 mps)
- St. Pete: Full T1 (1.5 mps)
- Apopka: Full T1 (1.5 mps)
- HCC: Full T1 (1.5 mps)
- Internet2 & FloridaLambdaRail

I S Milestones

- Chaotic
- Reactive
- Proactive
- Service
- Value
Distance Learning/Web Based Technologies

Boyd E. Robinson
Director-Community Based Programs

Goal #1: Expand and Evaluate Video Teleconferencing
- Upgrade Technology
  - D3-3
  - St. Petersburg Clinic

TeleDentistry Equipment
Polycom Technology
Goal #1: Expand and Evaluate Video Teleconferencing

- Upgrade Technology
  - D3-3
  - St. Petersburg Clinic
- Video Teleconferencing Cart
  - Active Consultations (Oral Pathology first)

Synchronous Consultations
- Ties with Digital Radiography
- Dual screen

"Virtual Study Groups"
Interactive Distance Learning

Goal #2: Develop Web Based Technologies

- “Case of the Month”
- Develop educational site for dental patients with common, chronic, or difficult treatment
- Aid in the development of “Virtual Study Groups”

Digital Radiography

Jeff Loomis, MHA
Associate Director-UF Center for Telehealth
Why Digital Radiography?

- EIP – Electronic Image Processing
- Do more and see more
- Archiving & Durability
- Print, re-print, and never lose
- Increased Efficiency
- Take more x-rays... faster
- Decreased Overhead
- No more film or chemicals to purchase

Technology Considerations

Phosphor Storage Plates (PSP) vs. Direct Digital

- Equipment durability
- Plates are similar to regular film
- Wider selection of PSP sizes
- Initial cost vs. replacement costs

Medicor Imaging

- Improved processing
- Analysis tools
- Clinical software integration
- Integrates with telehealth hardware
Implementation

- Phase 1
  - Main radiography
  - Endo
- Phase 2
  - Pedo, FTD, Faculty Practice, Graduate
  - Perio, Student Prosthetics
  - Satellite clinics

EVALUATION

Neale Chumbler, PhD

Why do we evaluate?

- Teledentistry is not a single form of technology, but part of the wider process of healthcare delivery.
- Any new form of technology should be rigorously evaluated in terms of improving health outcomes and reducing costs.
Primary Evaluation Objectives

Assemble and share information concerning the origin, implementation, and outcomes of the teledentistry initiative.

Months 1 - 6

- Identify appropriate measures to assess the project.
- Determine how the project’s outcomes will be assessed.
  - Satisfaction with web and video based instruction and telemedicine consultation services
- Determine how the project’s success will be assessed.
Where are we now?

- UFCD Needs Assessment developed and administered via E-mail and on paper.
- Survey instruments developed.
  - Case of the Month
  - Distance Learning via Video Conferencing
- IRB approval

University of Florida College of Dentistry Needs Assessment: Teledentistry - December 2004

9. What component of the proposed UFCD teledentistry program are you most likely to use? Check all that apply.
- Live interactive videoconferencing
- Live demonstrations of various dental procedures
- Online “Case of the Month” to test your clinical skills and earn CE credit
- Dental Study Clubs using live video conferencing and web-based instruction
- Web-based Educational Experiences
- Remote Clinical Consultation
- Use of Digital Radiography

Survey Instrument: Distance Learning via Video Conferencing

- Participant satisfaction and expectations
- Picture and sound quality
- Benefits and limitations of videoconferencing
- Knowledge gained from the course
- Applicability and benefit to the participant’s practice
Survey Instrument: Case of the Month
- Participant expectations
- Participant satisfaction with content and Web format
- Benefits and limitations of online format
- Online picture quality
- Knowledge gained from Case of the Month and usefulness in participant’s practice
- Clinical confidence about topic

What’s Next????
- Develop survey instruments for Clinical Consultation and Digital Radiography.
- Case of the Month Randomized Trial
- Data Collection and Analysis

Proof of effectiveness for future funding opportunities