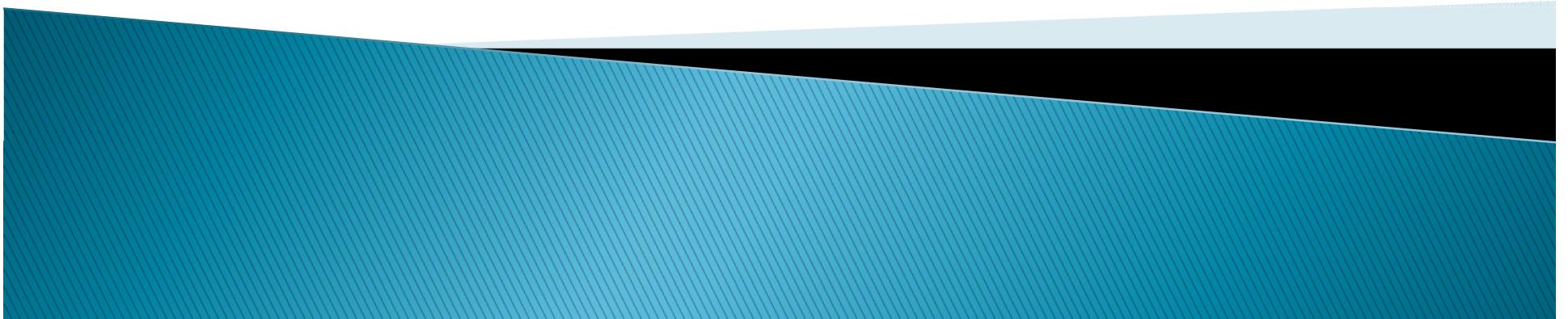


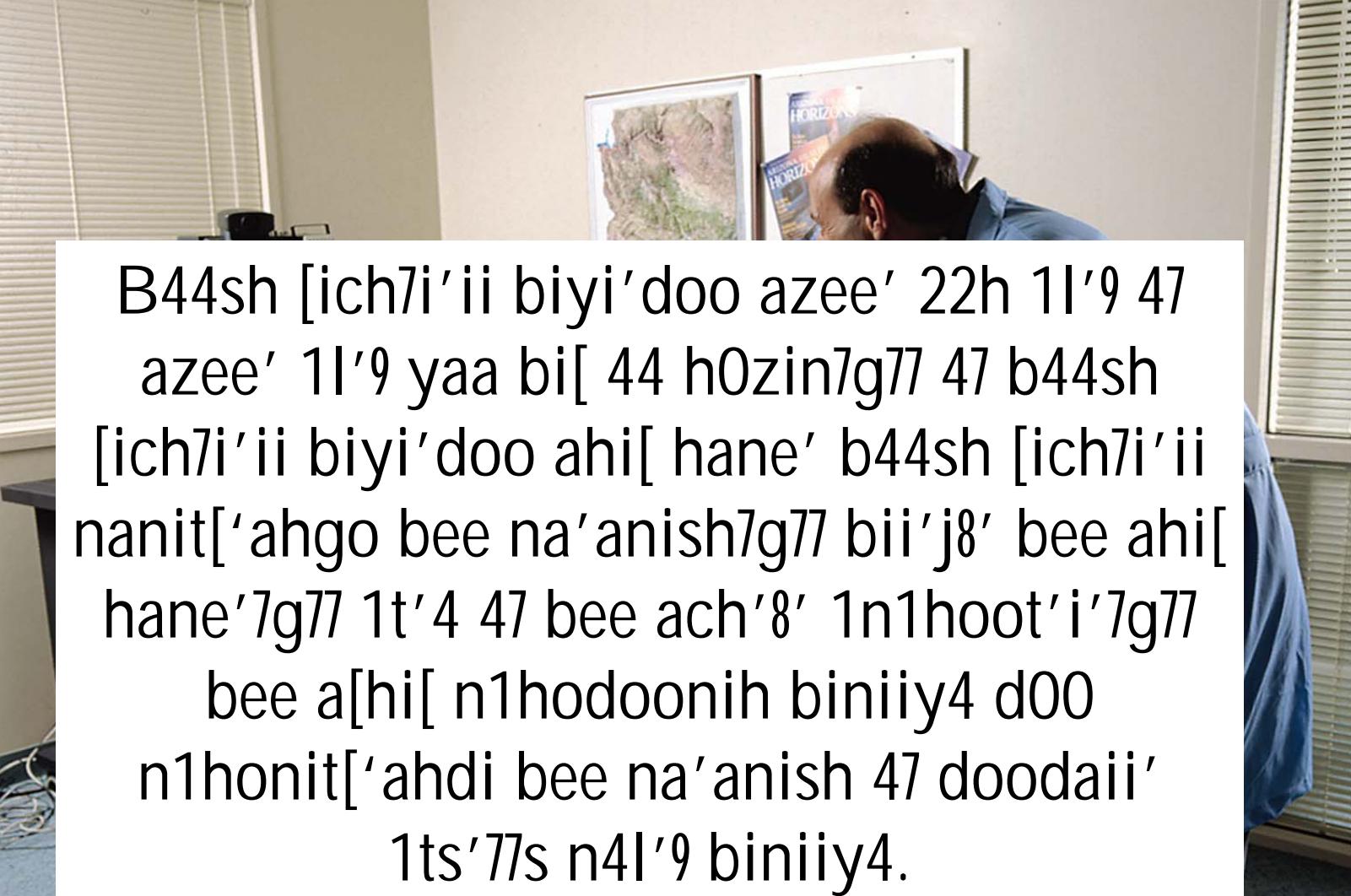
ARIZONA  
TELEMEDICINE  
PROGRAM



B44sh [ich7i'ii  
biyi'doo azee' 22h  
1l'9 N4l'9







B44sh [ich7i'ii biyi'doo azee' 22h 1l'9 47  
azee' 1l'9 yaa bi[ 44 h0zin7g77 47 b44sh  
[ich7i'ii biyi'doo ahi[ hane' b44sh [ich7i'ii  
nanit['ahgo bee na'anish7g77 bii'j8' bee ahi[  
hane'7g77 1t'4 47 bee ach'8' 1n1hoot'i'7g77  
bee a[hi[ n1hodoonih biniiy4 d00  
n1honit['ahdi bee na'anish 47 doodaii'  
1ts'77s n4l'9 biniiy4.

Published 2009

# History of Telemedicine

Evolution, Context, and Transformation

Rashid L. Bashshur, PhD • Gary W. Shannon, PhD

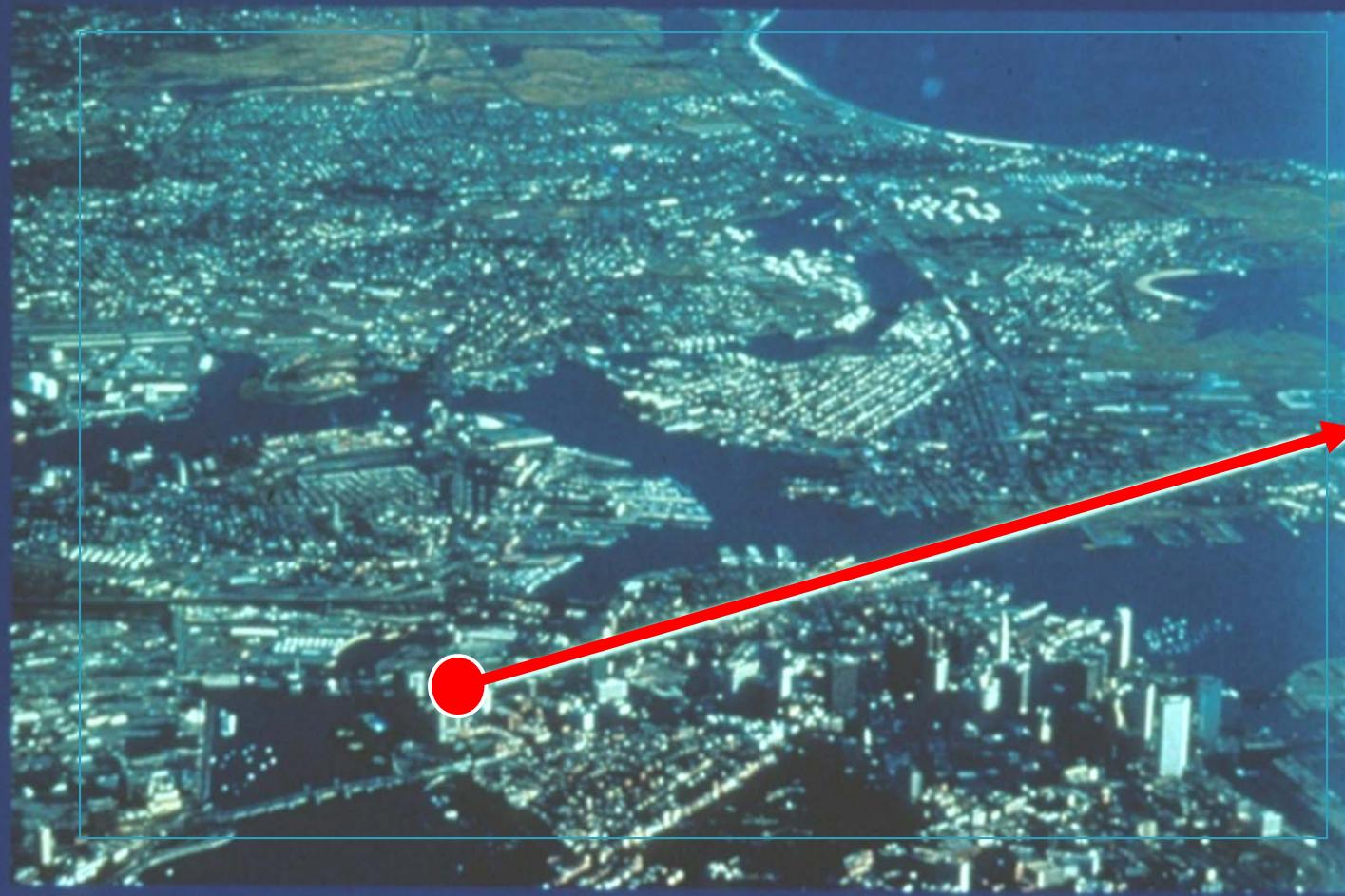
Supported by The National Library of Medicine

Mary Ann Liebert, Inc.  publishers

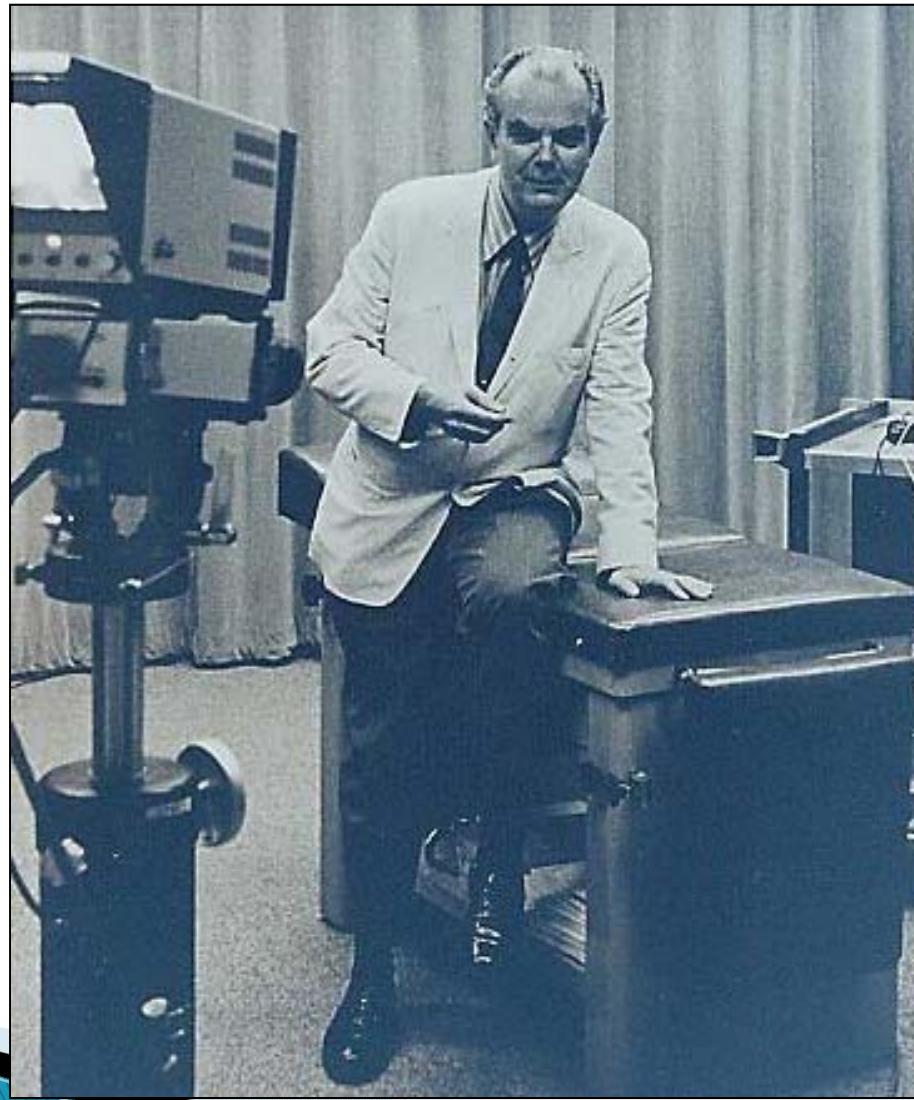
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TELEMEDICINE  
PROGRAM



Massachusetts Be'azee' 1l'98di-  
Logan B44sh Naat'a'l Azee' 1l'9 bi[ Haz'32gi  
1968-1975 Kenneth T. Bird, M.D.



Dr. Kenneth T. Bird 47 b44sh [ich7i'ii biyi'doo  
azee' 1l'9n7g77 a[k'7d33' bi[ hahoolzh77zh y66d33'  
(circa 1968)



1968



# Baa n1honeezt[ 'aa7g77 bitis dah hodiiłzhiizh

D99 ts&sit3 Boston Harbor biyaagi bin7k1'7g44d7g77



ARIZONA  
TELEMEDICINE  
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# T'11 k'4hazd0n7go Ah00t'i'

naaki ts&sit3 d00 bi'aan tsots'id 47 ni[ch'7 bee hane'4 bee e'4l'9

Massachusetts  
Be'azee' 11'9

Logan B44sh Naat'a'7 bi[ haz'32gi

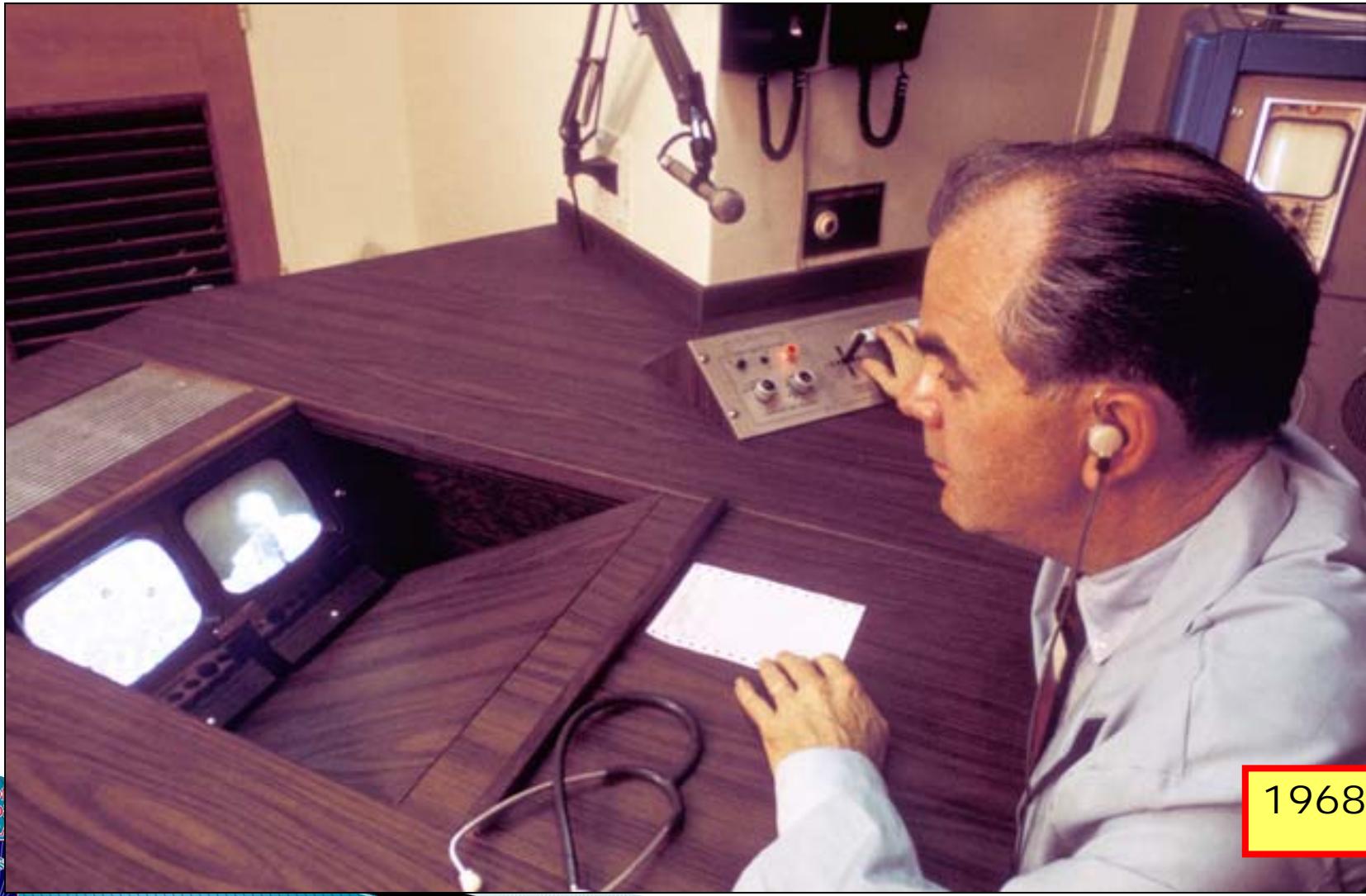


Hodi'n4l'88hgi bee i'iilkeed7 t1d7t'aah7g77 si'3

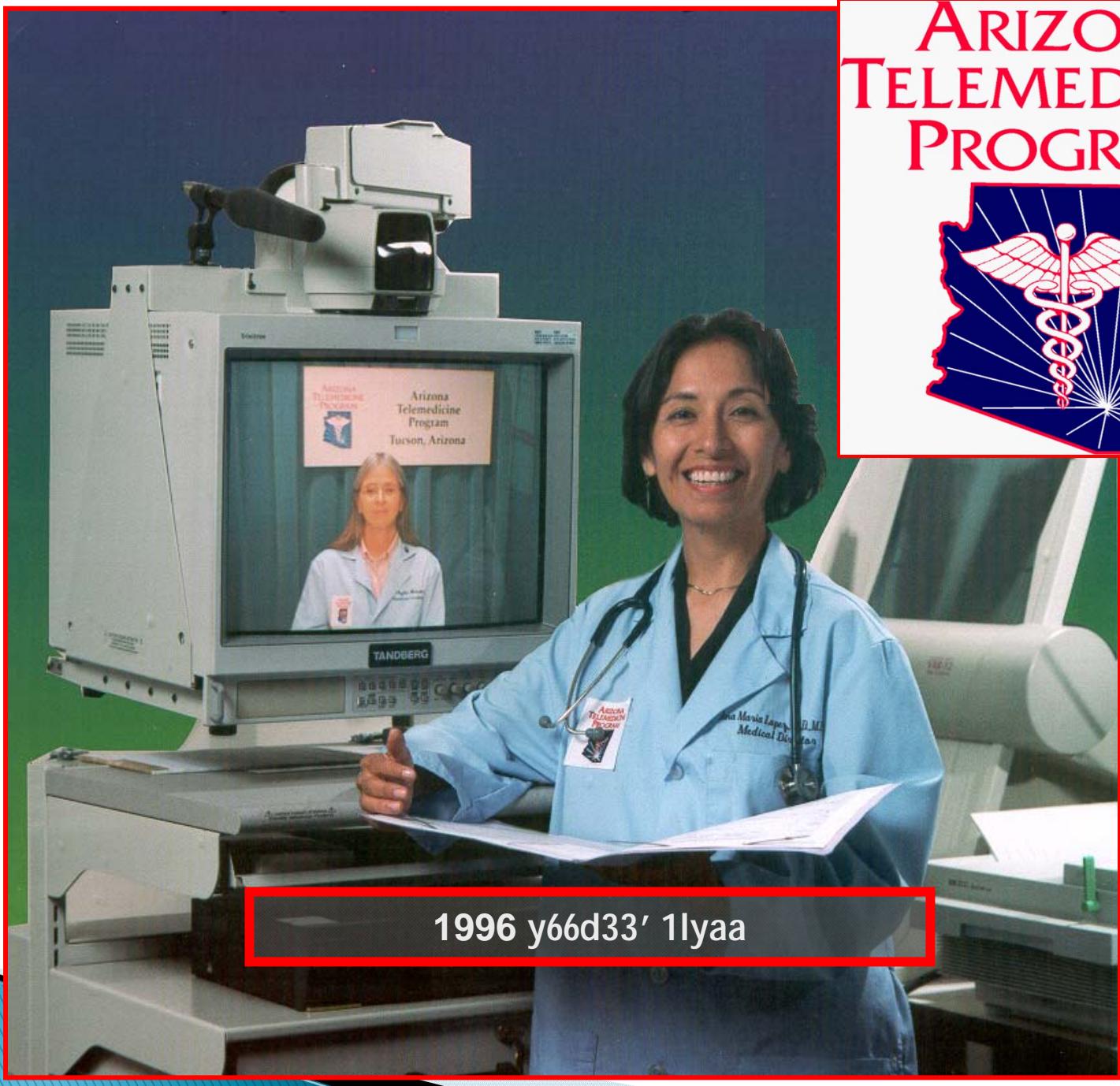


1968

# MGH Logan B44sh Naat'a'7 Azee' 11'9 bi[ Haz'32gi yich'8' halne'

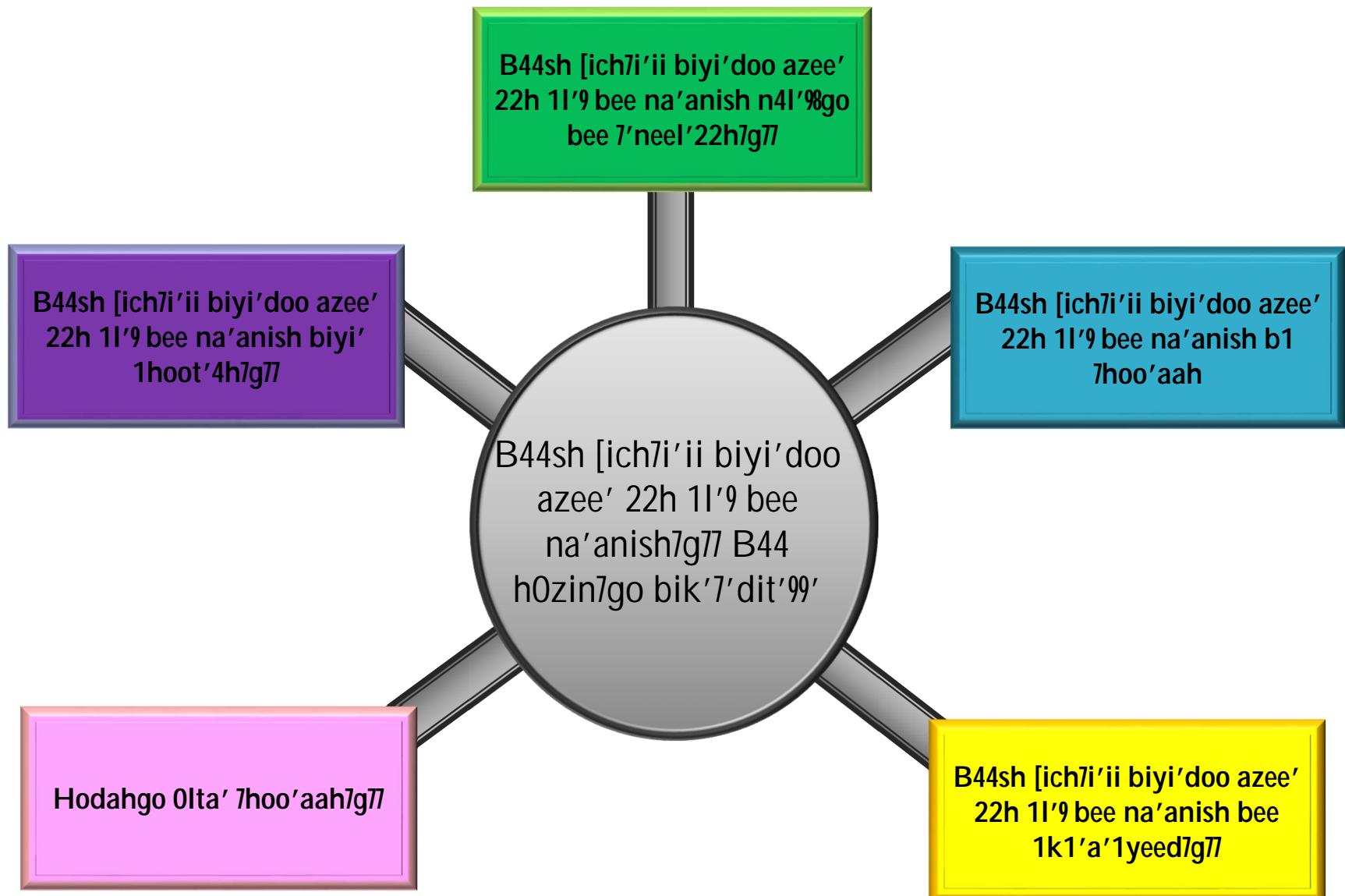


# ARIZONA TELEMEDICINE PROGRAM



# B44sh [ich7i'ii biyi'doo azee' 22h 1l'9 1y7sii a['33 1t'4ego bee da'7n7sh7g77

Nahat'1ago bik'ehgo a'dooly88[7g77	B1 nida'anish7g77	Azee' 1l'9 bee 1k1'a'1yeed	B44sh [ich7i'ii biyi'doo azee' 22h 1l'9 bee na'anish b1 7hoo'aah
Nizaad66' 7hoo'aah	B44sh [ich7i'ii bee ahi[ dahane'7g77 bee na'anish	B4eso naat'i'j7	Aah hwiin7t'9 Bi[ naazt'i'j7
Na'anish bi[ nahaz'32g00 ahi[ nidaalnish7g77	Nidahaniih d00 din4 bi[ na'anish	W11shindoon bi[ naazt'i'j7	Bee na'anish n4l'8go bee i'n4el'22h7g77



**B44sh [ich7i'ii biyi'doo azee' 22h 1l'9 bee na'anish biyi' 1hoot'4h7g77**

**B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish n4l'8go  
bee 7'neel'22h7g77**

**B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish b1  
7hoo'aah**

ich7i'ii biyi'doo  
22h 1l'9 bee  
ish7g77 B44  
o bik'7'dit'99'

**Hodahgo 0lta' 7hoo'aah7g77**

**B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish bee  
1k1'a'1yeed7g77**

# Arizona Telemedicine Bee na'anishlg77 Hadeidiila



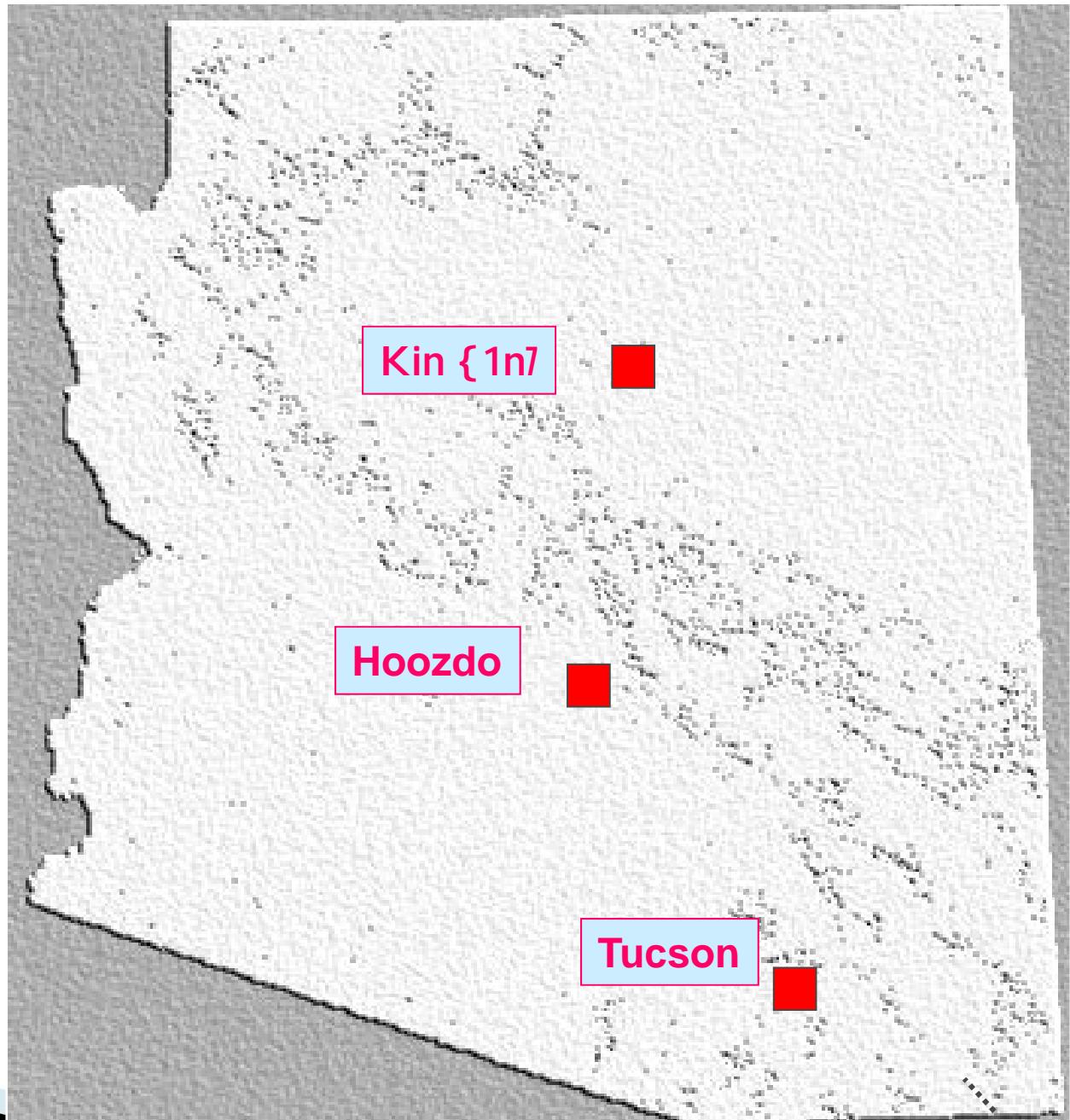
Richard A. McNeely   Ronald S. Weinstein, M.D.   Rep. Robert "Bob" Burns   John J. Lee  
Rep. Lou-Ann Preble   Rachael Anderson

**Arizonaj7 1996**

**0 Sites**

**“Virtual Utility”**

**Membership-based  
state-wide  
telehealth  
telecommunication  
collaborative**



**ARIZONA  
TELEMEDICINE  
PROGRAM**

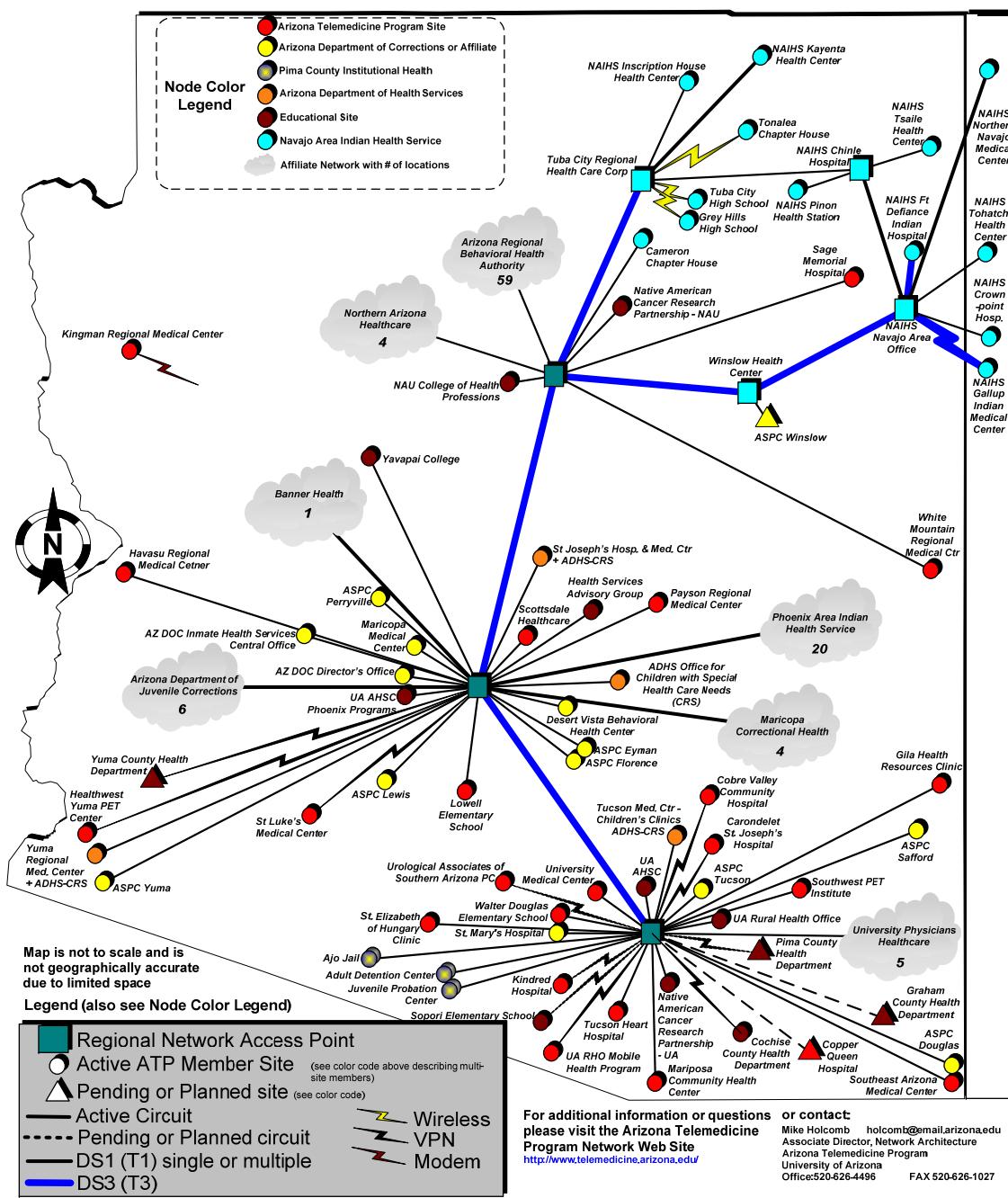


## Telemedicine Communities

Ajo, AZ  
 Amado, AZ  
 Apache Junction, AZ  
 Avondale, AZ  
 Benson, AZ  
 Bisbee, AZ  
 Bloomfield, NM  
 Buckeye, AZ  
 Bullhead City, AZ  
 Cameron, AZ  
 Casa Grande, AZ  
 Chinle, AZ  
 Cibecue, AZ  
 Cottonwood, AZ  
 Crownpoint, NM  
 Douglas, AZ  
 Eloy, AZ  
 Flagstaff, AZ  
 Florence, AZ  
 Ft. Defiance, AZ  
 Ft. Duchesne, UT  
 Gallup, NM  
 Ganado, AZ  
 Globe, AZ  
 Goodyear, AZ  
 Green Valley, AZ  
 Holbrook, AZ  
 Kayenta, AZ  
 Kearny, AZ  
 Kingman, AZ  
 Lake Havasu City, AZ  
 Laveen, AZ  
 Marana, AZ  
 Mesa, AZ  
 Morenci, AZ  
 Nogales, AZ

## ARIZONA TELEMEDICINE NETWORK

Current and Pending WAN Connections as of May 2006



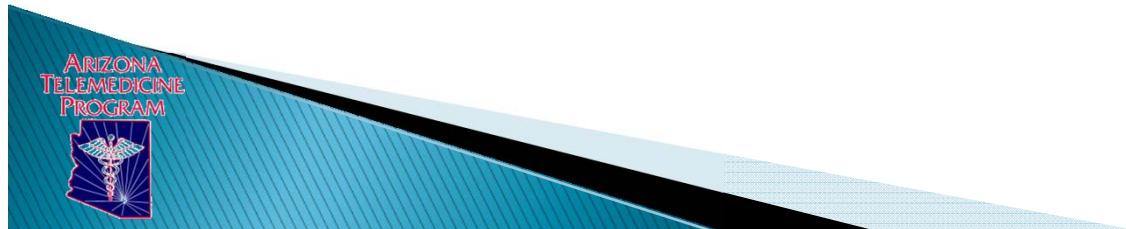
## Telemedicine Communities

Oracle, AZ  
 Page, AZ  
 Parker, AZ  
 Payson, AZ  
 Phoenix, AZ  
 Pinon, AZ  
 Polacca, AZ  
 Prescott, AZ  
 Prescott Valley, AZ  
 Quartzsite, AZ  
 Sacaton, AZ  
 Safford, AZ  
 Salt Lake City, UT  
 San Carlos, AZ  
 San Luis, AZ  
 Scottsdale, AZ  
 Sells, AZ  
 Shiprock, NM  
 Shonto, AZ  
 Show Low, AZ  
 Sierra Vista, AZ  
 Springerville, AZ  
 St. Johns, AZ  
 Supai, AZ  
 Tempe, AZ  
 Tohatchi, NM  
 Tonalea, AZ  
 Tsaiile, AZ  
 Tuba City, AZ  
 Tucson, AZ  
 Wellton, AZ  
 Whiteriver, AZ  
 Window Rock, AZ  
 Winslow, AZ  
 Yuma, AZ



# Telemedicine Program Sites

- ▶
- ▶
- ▶
- ▶
- ▶
- ▶
- ▶
- ▶
- ▶



B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish biyi'  
1hoot'4h7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish n4l'8go  
bee 7'neel'22h7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish b1  
7hoo'aah

B44sh [ich7i'ii biyi'doo  
azee' 22h 1l'9 bee  
na'anish7g77 B44  
h0zin7go bik'7'dit'99'

## Professional Education

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish bee  
1k1'a'1yeed7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish n4l'8ao

## B44sh [ich7i'ii biyi'doo azee' 22h 1l'9 bee na'anish n4l'8go bee 7'neel'22h7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish b1  
7hoo'aah

azee' zzn 1l'9 bee  
na'anish7g77 B44  
h0zin7go bik'7'dit'99'

Hodahgo 0lta' 7hoo'aah7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish bee  
1k1'a'1yeed7g77

## Applications Clearing House

- Kin Naach'22hj7
- Hai 47 baa nida'diyoon7g77 bitah hidoodlah

Naanish bik'eh yilwo[  
doolee[7g77 hadadidooly&[

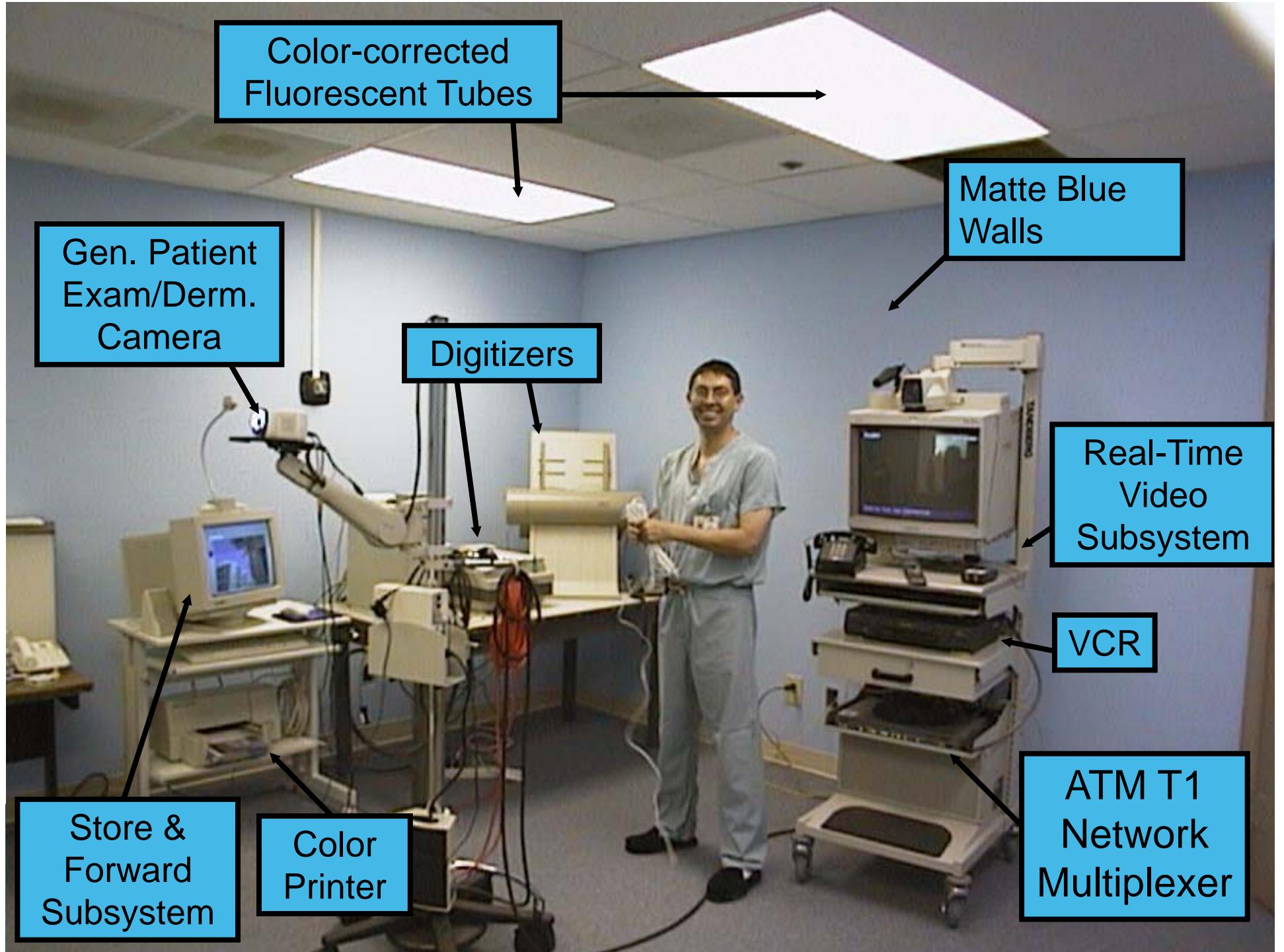
**Arizona B44sh [ich7i'ii biyi'doo azee' 22h 1I'9  
B44sh { ich7i'ii Nanitl'ahgo Bee Na'anish7g77 Bee Na'anishN4I'%'go  
bee &n4el'33h7g77**

Asee' ! I'%'j7 Bik'ehgo Na'anish Doolee[7g77 A[k44'  
nidoo'ni[  
• ! I11hdi Nizh0n7go Bik'ehgo ! 'dooly&[

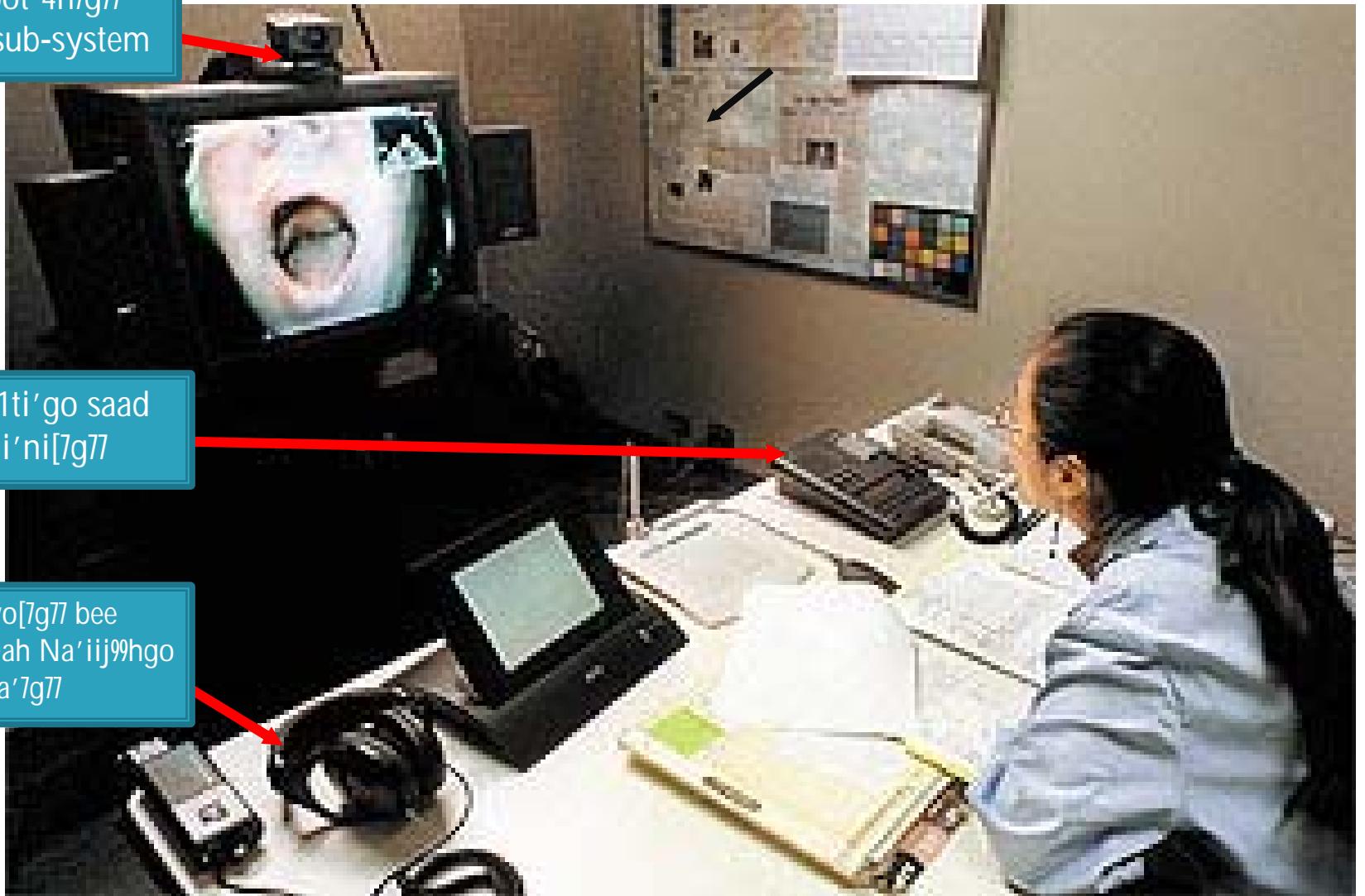
Adooly&[7g77 \$1 B44 H0zin7go D00 Azee' ! I'%'j7 Na'alkaah  
• D7kw77d66' Sh99 B4eso B1 W0keed7g77 D00 Bee A[ha'deet'3n7g77

B44sh [ich7i'ii biyi'doo azee' 22h 1l'8j7 T'1adoo Le'4 Bee Nida'anish7g77  
A[hi[ Nidaalnishgo &deiy7n0sindoo \$7 T'11 ! t'4 B44sh [ich7i'ii  
da'ni[ts'33hd66' bee ahi[ na'anish7g77





Azee' Ii[9'n7 Yiini[9'  
K'ad ! hoot'4h7g77  
Naalkid bi sub-system



Bii'j8' Ya'1ti'go saad  
bik'7nihi'ni[7g77

Aj47 Yilwo[7g77 bee  
Wolts'3'7g77 Dah Na'iij99hgo  
WO[ta'7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish biyi'  
1hoot'4h7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish n4l'8go  
bee 7'neel'22h7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish b1  
7hoo'aah

B44sh [ich7i'ii biyi'doo  
azee' 22h 1l'9 bee  
na'anish7g77 B44  
h0zin7go bik'7'dit'99'

Hodahgo 0lta' 7hoo'aah7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish bee  
1k1'a'1yeed7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish biyi'  
1hoot'4h7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish n4l'8go  
bee 7'neel'22h7g77

B44sh [ic  
azee'  
na'an  
h0zin7g

**B44sh [ich7i'ii biyi'doo  
azee' 22h 1l'9 bee  
na'anish b1 7hoo'aah**

doo azee'  
nish b1

Hodahgo 0ita' 7hoo'aah7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish bee  
1k1'a'1yeed7g77



## ARIZONA TELEMEDICINE PROGRAM

[Home](#)   [About Us](#)   [Clinical Services](#)   [Distance Education](#)   [Applications & Network](#)   [Publications](#)

### ***Hot Links***

- [ATP Help Desk](#)
- [ATP Training](#)
- [Arizona Telemedicine Council](#)
- [Press Releases](#)
- [Tele-Diabetes Programs](#)
- [Frequently Asked Questions](#)
- [Contact Us](#)

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### ***Training***

#### **Arizona Telemedicine Training Program**

The Arizona Telemedicine Training Program provides instruction in the many aspects of running a telemedicine program. Topics include clinical applications, telecommunications infrastructure development and operations, distance education, evaluation, business and administration.

The training program offers both one and two day training conferences.

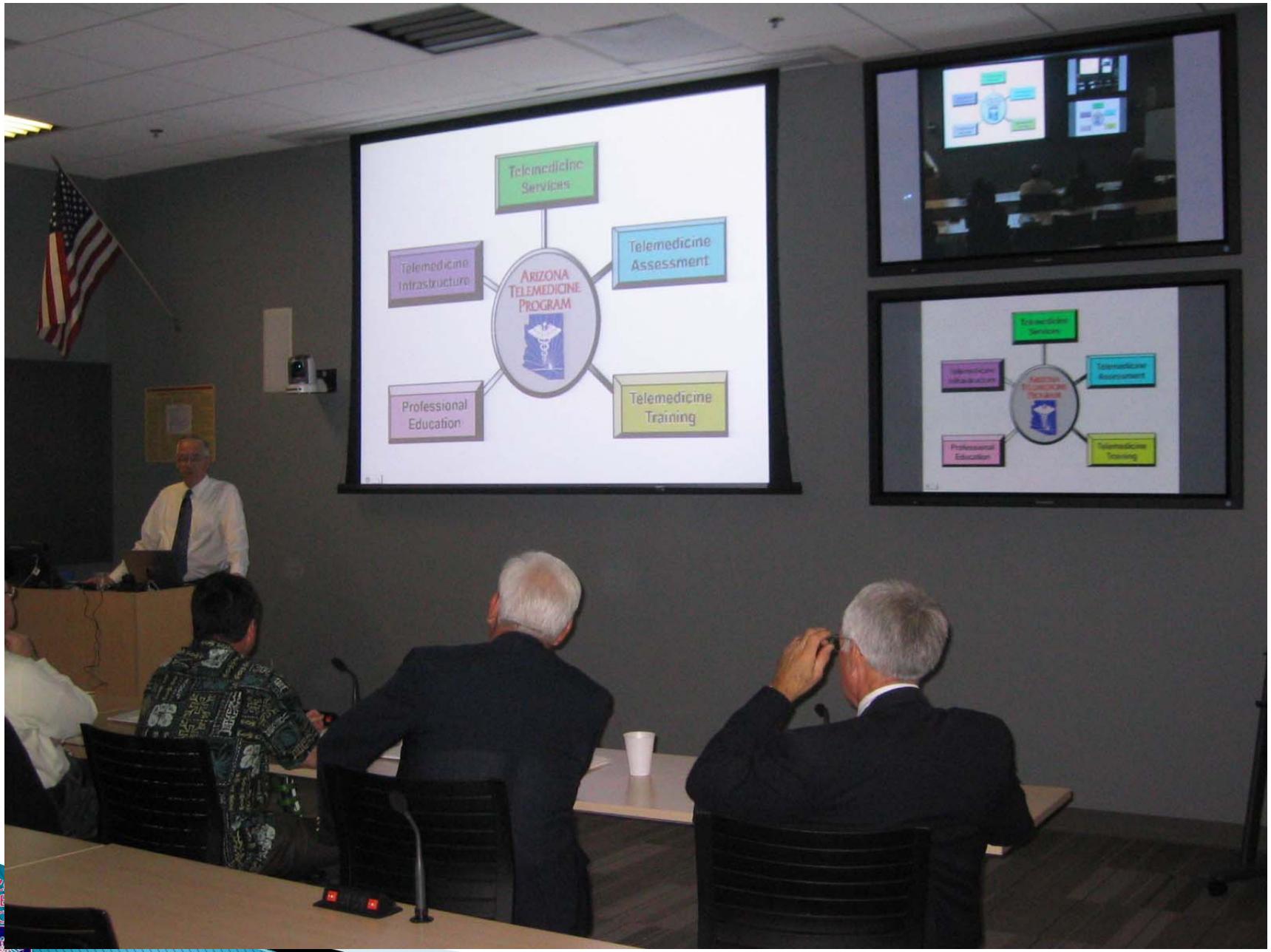
##### **Hands-on Training**

The 1 day conferences provide a general overview of various telemedicine program components. These 1 day conferences are ideal for individuals or groups just beginning a telehealth program. It's the perfect course for busy professionals who have a hard time getting away for multiple days. This course also serves as a great refresher course for previous attendees.



The 2 day conferences offer a more detailed "how-to" approach for any telemedicine program. These 2 day conferences offer a more in-depth look of the clinical aspects of a telehealth program. These 2 day conferences are excellent for individuals or groups who have some telehealth experience and are looking to expand their services. It's also a great course for those new to telehealth who are looking to understand this growing industry.

**ARIZONA  
TELEMEDICINE  
PROGRAM**







Arizona  
TELEMEDICINE  
PROGRAM



B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish biyi'  
1hoot'4h7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish n4l'8go  
bee 7'neel'22h7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish b1  
7hoo'aah

B44sh [ich7i'ii biyi'doo  
azee' 22h 1l'9 bee  
na'anish7g77 B44  
h0zin7go bik'7'dit'99'

Hodahgo 0lta' 7hoo'aah7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish bee  
1k1'a'1yeed7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish biyi'  
1hoot'4h7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish n4l'8go  
bee 7'neel'22h7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish b1  
7hoo'aah

**B44sh [ich7i'ii biyi'doo  
azee' 22h 1l'9 bee  
na'anish bee  
1k1'a'1yeed7g77**

Hodahgo 0lta' 7hoo'aah7g77

biyi'doo azee'  
a'anish bee  
1k1'a'1yeed7g77

B44sh [ich7i'ii biyi'doo  
bee agha'd7ldla' yee

4da'1niih7g77

**500,000+ cases**

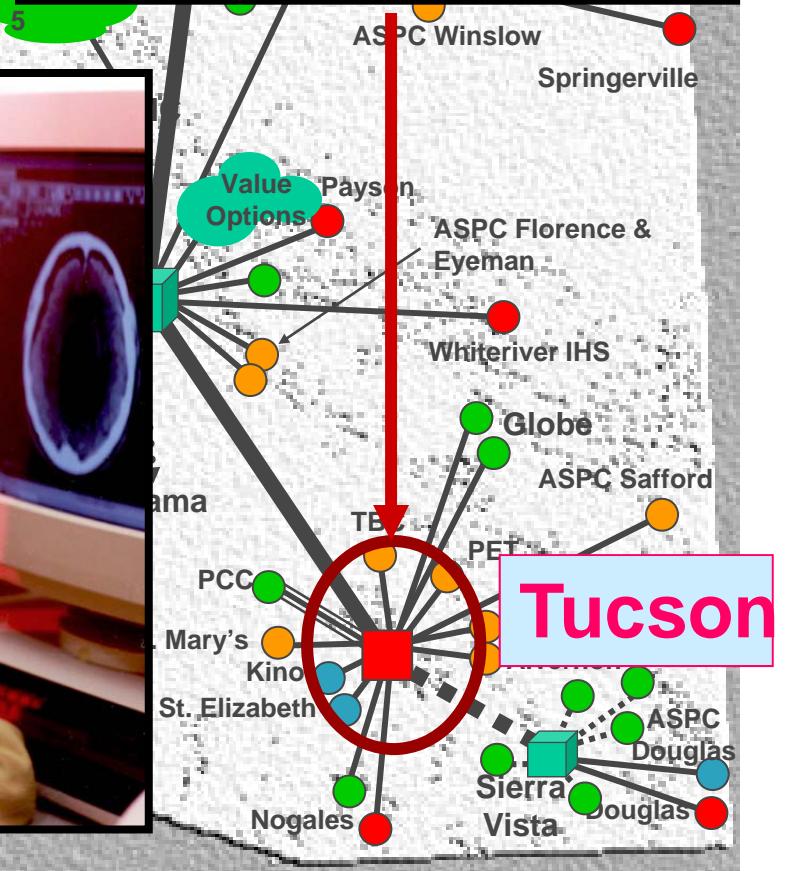
Din4 Bik4yah -

- 12 Azee' 1l'9
- Y4ego bich'8'
- 1n7dahaz't'i'7g77
- B44sh [ich7i'ii biyi'doo bee  
habe' n4l'9n7g77
- Hats'7ls biyi' diits'a'7g77  
t'11 a[tsod66' hats'7ls  
binika'd7ldla' hats'in d00  
hats8' 1t'4h7g77
- MRI

Chish7 d00 Dzi[gh2'7

bik4yah -

\$182,000 b4eso t'1adoo  
chooz'9d da chid7 naat'a'7  
t'1adoo bee na'azhnish da  
[a' azee' 1l'9d66' da



# *Teledermatology*

B44sh [ich7i'ii biyi'doo bee ak1g7 naalkaah





344sh [ich7i'ii biyi'doo bee ak1g7 naalkaah

 Arizona TeleBehavioral Health Network - Microsoft Internet Explorer

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Address  http://www.rbha.net/ Go Links >

info and news

  
 Arizona TeleBehavioral Health Network

info and news

Welcome  
Featured Links  
Network News  
Contact Information

program overview  
site coordinators  
site calendars  
forms  
procedures & guidelines  
activity data  
resources

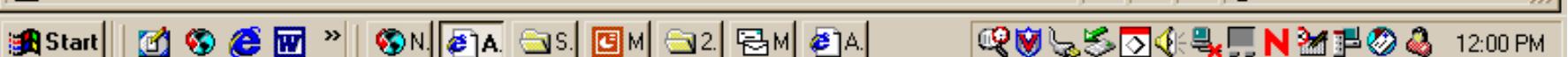
quick links

 request form  network map  weekly network meetings

welcome

Welcome to the **Arizona TeleBehavioral Health Network** website.  
Our goal is to provide network users with simplified methods for:

- requesting connectivity for videoconferences
- capturing and reporting videoconference activity data
- viewing weekly videoconferences scheduled across networks
- obtaining information (news, procedures/guidelines, forms)

  
Start Internet 12:00 PM

B44sh [ich7i'ii biyi'doo bee -1n7ts4kees bee  
ach'8' ya'1ti'





**Sara Gibson, M.D.**

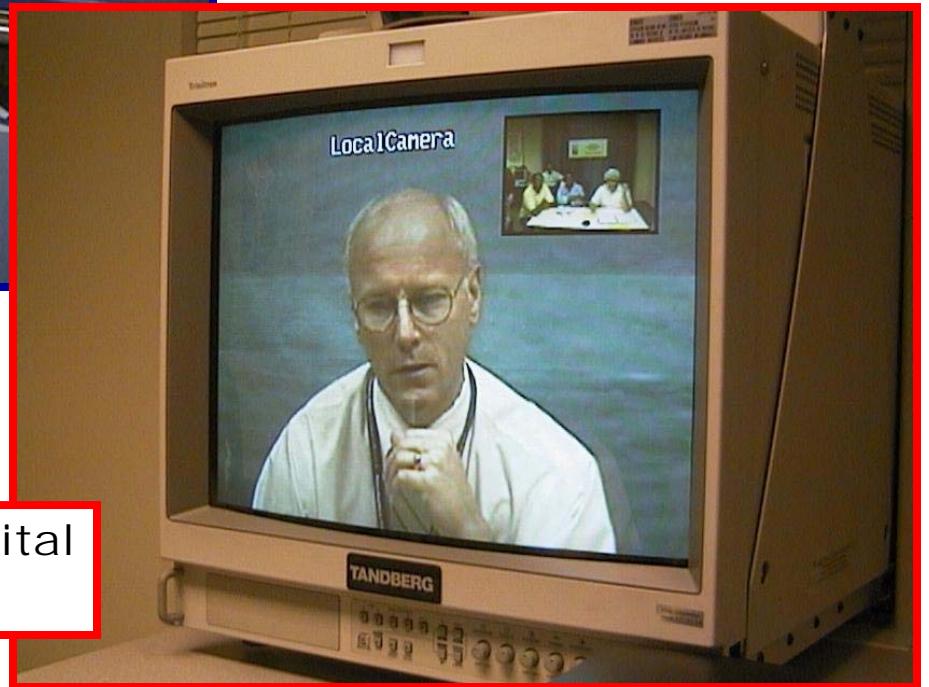


## Interstate Telemedicine



Arizona Telemedicine Program  
Tucson, AZ

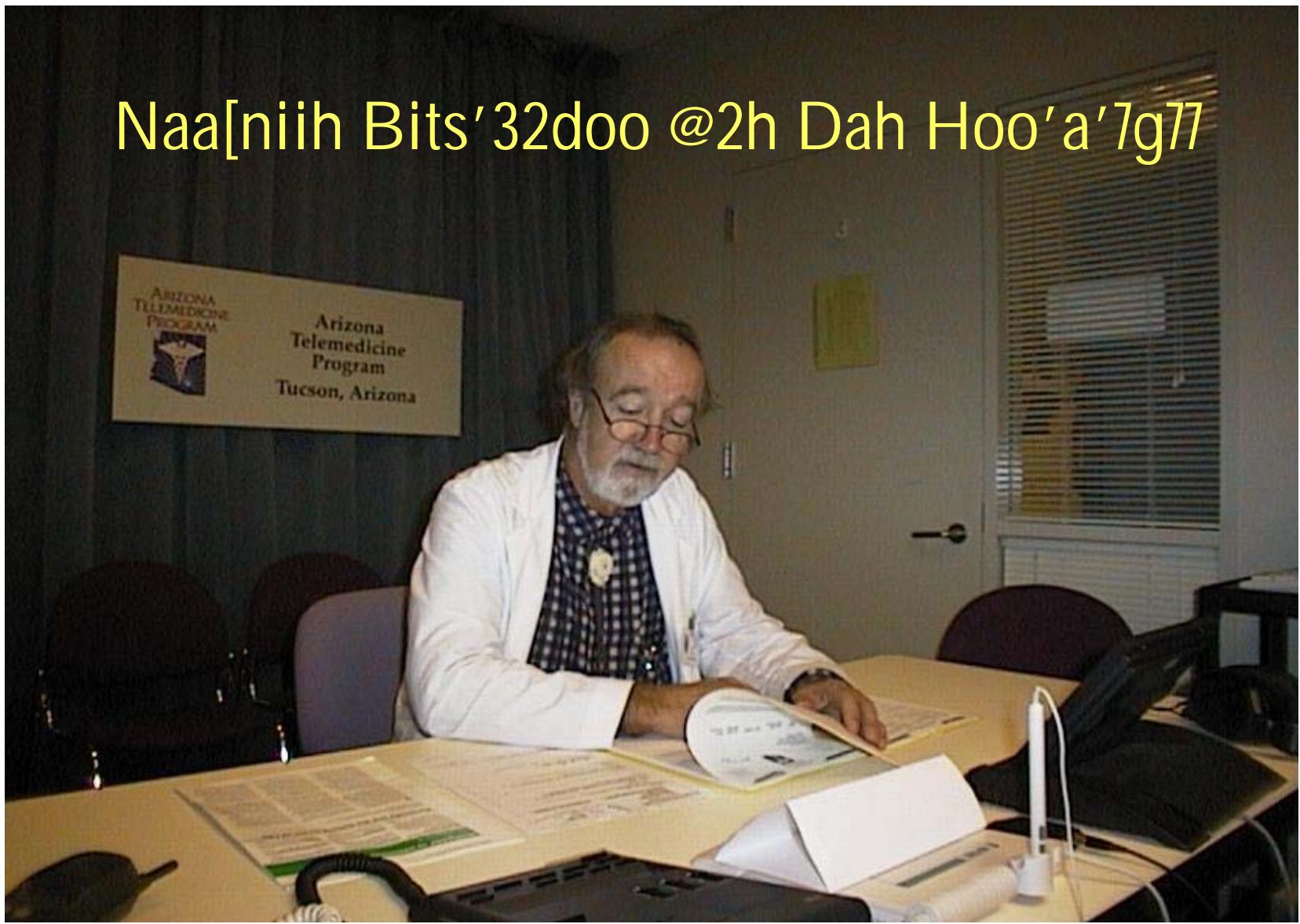
Intermountain Shriners Hospital  
Salt Lake City, Utah



# B44sh [ich7i'ii biyi'doo naa[niih yee 4da'1niih7g7]



Naa[niih Bits'32doo @2h Dah Hoo'a'lg77



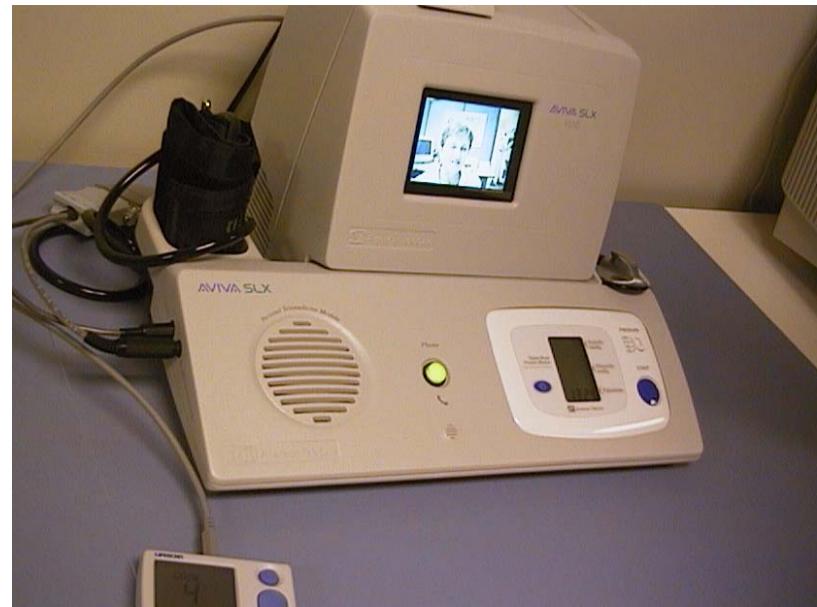
B44sh { ich7i'ii Biyi'doo Jidiniih7g77 Bee  
@2h A'1l'9 Be'azee' ! I'98j7



B44sh { ich7i'ii Biyi'doo T'11  
Hooghandoo Ats'7ls Baa  
! hay3

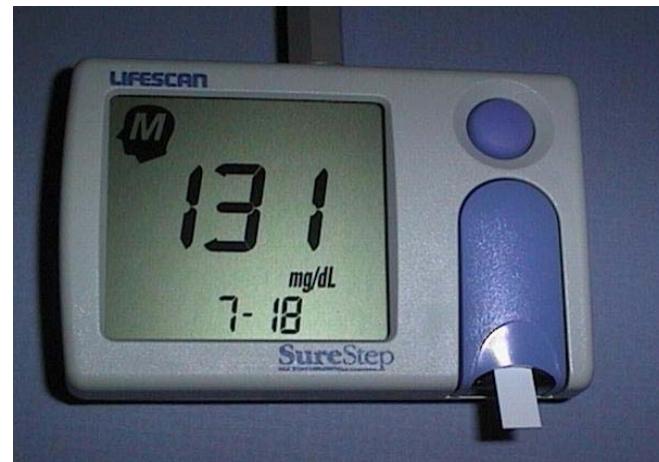


B44sh { ich7i'ii Biyi'doo T'11 Hooghandoo Ats'77s Baa ! hay3



B22h Dah Haz'3n7g77 Bighandi Bi[ Na'anishgo Haz'3

Azee' Neik1h7 Binaanish  
Bi[ Haz'32gi



B22h Dah Haz'3n7g77 ! sh88h { ik1nii Bidi[ Bii'  
H0l=n7a77 Bee N4I'9



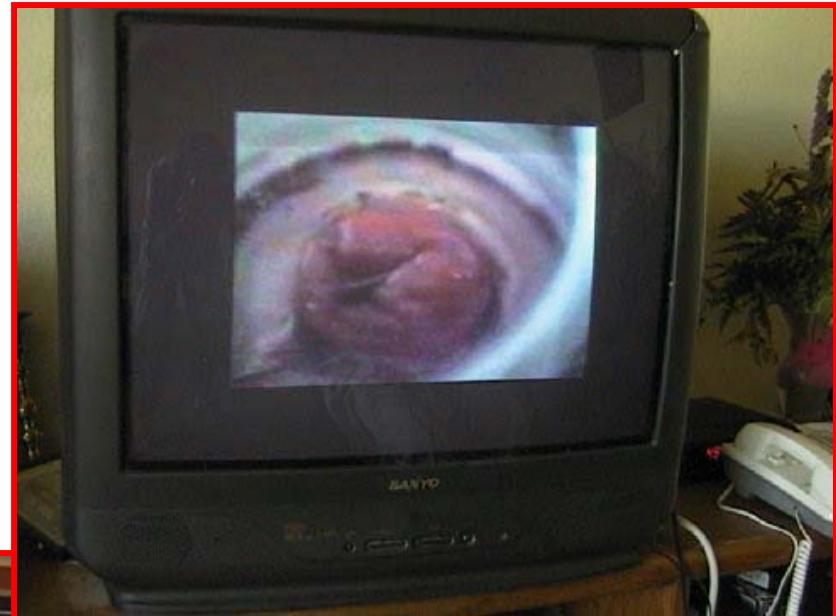
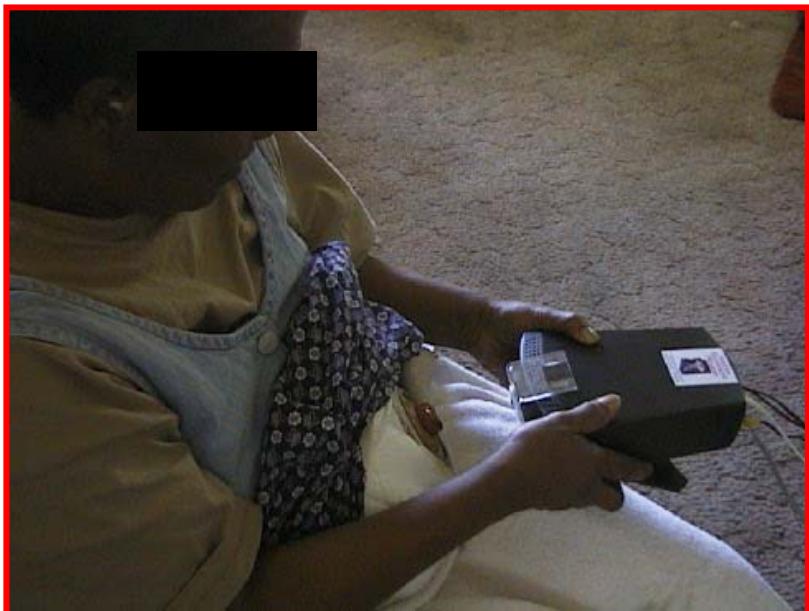
# Home Health – Ostomy Care



Hachaan Bee Hach'8'  
N1hwii'n11go Biniiy4  
Naho'digishgo

Halizh Bee Hachi8'  
N1hwii'n11go Naan1  
{ ahgigo Haal88goH1  
! I'88h





# Teleophthalmology

B44sh [ich7i'ii bee an11' n4I'98go yee 1da'1niih7g77



# Telecolposcopy



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B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish biyi'  
1hoot'4h7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish n4l'8go  
bee 7'neel'22h7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish b1  
7hoo'aah

B44sh [ich7i'ii biyi'doo  
azee' 22h 1l'9 bee  
na'anish7g77 B44  
h0zin7go bik'7'dit'99'

Hodahgo 0lta' 7hoo'aah7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish bee  
1k1'a'1yeed7g77

# Hodahgo Olta' 7hoo'aah7g77

Hodahgo Ol

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish b1  
7hoo'aah

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish bee  
1k1'a'1yeed7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish n4l'8go  
bee 7'neel'22h7g77

B44sh [ich7i'ii biyi'doo azee'  
22h 1l'9 bee na'anish biyi'  
1hoot'4h7g77



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<http://video.biocom.arizona.edu>

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New Approaches to Deafness

Glen E. Green, MD

realplayer FREE

# Distance Education

Nizaad66' 7hoo'aah7g77



10,000+ hours of CME/CE

Azee', N1ho'dilgish, ! [ch7n7 Azee B22h ! l9, ! n7ts4kees B22h Dah Haz'1n7g77 Bee B22h A'1l'9,  
Azee' Neik1h7, T'11 A[tso B1 Azee' ! l'9, Bee I[ Hane'

# <http://aztel.arizona.edu/calendar>

## username: atpguest password: atp123

<p><b>17</b></p> <p><u>7:30 a.m. - 8 a.m.</u> <u>Satellite Test Time: WRSU, SMH, SAMC</u></p> <p> <b>Satellite Programming</b> <u>8 a.m. - 12 p.m.</u> <u>Cultural Aspects of Death and Dying Speaker: Cheryl Mallernee McGaffic, PhD, RN, CCRN</u></p> <p><u>12 p.m. - 12:30 p.m.</u> <u>SGR Test Time: SAMC, WRSU, PRMC, MCHC</u></p> <p> <b>Surgery Grand Rounds</b> <u>12:30 p.m. - 1:30 p.m.</u></p>	<p><b>18</b></p> <p><u>10:45 a.m. - 11:15 a.m.</u> <u>Cardio Test Time: TCIMC, ADCPXC, ASPCEYM, ASPCDOU, ASPCFLO, ASPCYUM, SAMC</u></p> <p> <b>Cardiology Grand Rounds</b> <u>11:15 a.m. - 12:15 p.m.</u> <u>Cardiology Lecture Series (IHS Sites Only)</u></p>	<p><b>19</b></p> <p><u>11:30 a.m. - 12 p.m.</u> <u>MGR Test Time: ADCPX, ASPCEYM, ASPCFLO, ASPCYUM, ASPCDOU, SAMC, WRSU, PRMC</u></p> <p> <b>Medicine Grand Rounds</b> <u>12 p.m. - 1 p.m.</u> <u>Clinicopathological Conference</u></p> <p><u>3:30 p.m. - 4 p.m.</u> <u>Psych GR - Test Time - NARBHA, SAMC, TCIMC</u></p> <p> <b>Psychiatry Grand Rounds</b> <u>4 p.m. - 5:30 p.m.</u></p>	<p><b>20</b></p> <p><u>11:30 a.m. - 12 p.m.</u> <u>PHGR Test Time:</u></p> <p> <b>Public Health Grand Rounds</b> <u>12 p.m. - 1 p.m.</u></p>
<p><b>24</b></p> <p><u>11:30 a.m. - 12 p.m.</u> <u>SGR Test Time: SAMC, WRSU, PRMC, MCHC</u></p> <p> <b>Surgery Grand Rounds</b> <u>12 p.m. - 1 p.m.</u></p>	<p><b>25</b></p> <p><u>12 p.m. - 12:30 p.m.</u> <u>Peds GR Test Time:</u></p> <p> <b>Pediatric Grand Rounds</b> <u>12:30 p.m. - 1:30 p.m.</u></p>	<p><b>26</b></p> <p><u>11:30 a.m. - 12 p.m.</u> <u>MGR Test Time: ADCPX, ASPCEYM, ASPCFLO, ASPCYUM, ASPCDOU, SAMC, WRSU, PRMC</u></p> <p> <b>Medicine Grand Rounds</b> <u>12 p.m. - 1 p.m.</u></p>	<p><b>27</b></p>
			<p><b>28</b></p>

<http://video.biocom.arizona.edu>



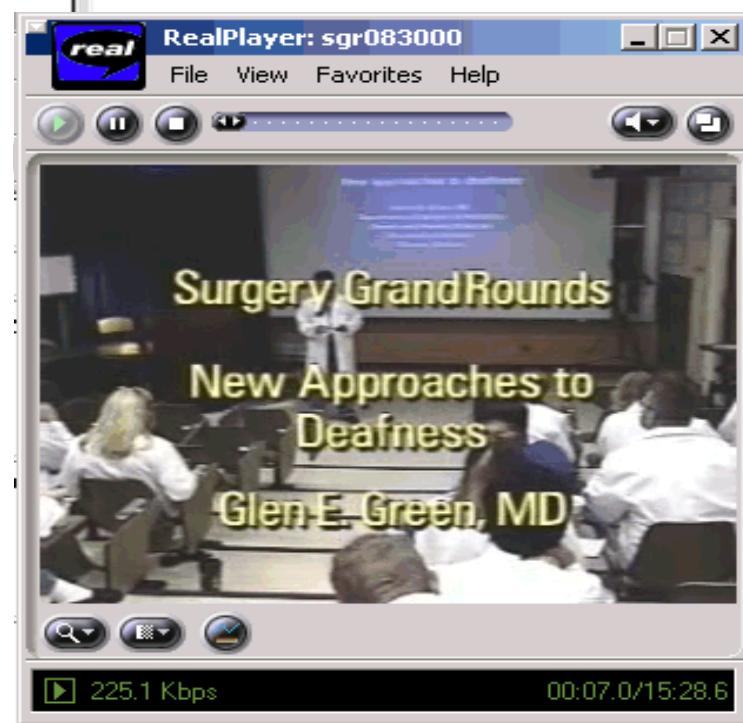
## Biomedical Communications

Streaming Video Server

Live Video



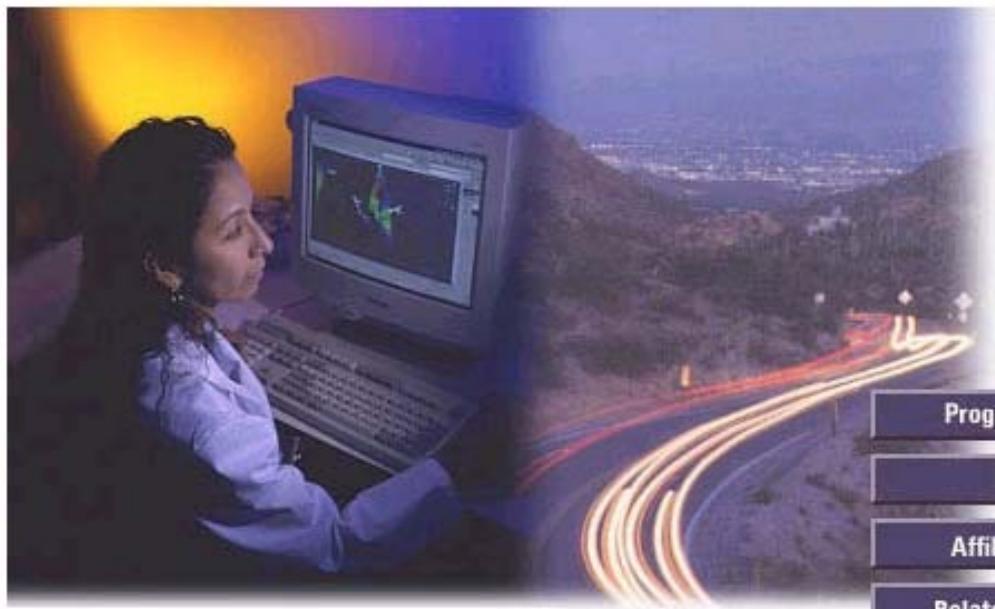
Video Files



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# Thank you

