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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

APR - 1 1999

Office of the Secretary
Federal Communications Commission
445 12th Street, SW, Room TW-A325
Washington, DC 20554

Dear Secretary:

Please substitute this corrected document for the original filing from the Office for the Advancement of Telehealth, Health Resources and Services Administration of the Health and Human Services Department, dated March 29, 1999. This filing provides comments on the Federal Communication Commission's (FCC) Public Notice: DA 99-521 regarding the Universal Service Administrative Company (USAC) Report to the FCC, "Evaluation of the Rural Health Care Program," CC Docket Nos. 96-45 and 97-21.

Sincerely,

Dena S. Puskin, Sc.D.
Director
Office for the Advancement of Telehealth

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979 rollins ave . rockville, md 20852 . voice: 301.443.0447 . fax 301.443.1330
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HRSA
OAT
OFFICE FOR THE ADVANCEMENT OF TELEHEALTH

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Dear Chairman Kennard:

This letter is in response to the Federal Communication Commission's (FCC) Public Notice: DA 99-521 regarding the Universal Service Administrative Company (USAC) Report to the FCC, "Evaluation of the Rural Health Care Program," CC Docket Nos. 96-45 and 97-21.

The Office for the Advancement of Telehealth (OAT) supports 41 telemedicine grantees, which represent over 300 rural telemedicine sites. The Universal Service Program is important to our rural health care providers because it potentially offers greater affordability for telecommunications services, which currently account for between 18% and 30% of our grantees' overall telemedicine costs. Consequently, OAT and its sister office, the Office of Rural Health Policy, have extensively publicized the Universal Service program through our newsletters, radio spots, video spots, and brochures that were developed for the public health sector. Moreover, our grantees are required to apply to the program as a condition of their award.

In practice, however, it became clear to many of our grantees early in the application process that: "the juice ain't worth the squeeze." Many of our grantees found that the program's discount rates were either non-existent or so small that it was not worth completing the complicated and multiple step application process. This problem with the discount rates was due in part to the way the benchmarks are calculated.

Specifically, the benchmark reflects month-to-month published tariffs for telecommunications services as compared to longer term published rates such as one, three or five-year published tariffs that are available to large organizations. For example, a large urban hospital can negotiate a three-year tariffed rate with its telephone company, who in turn, may waive its installation fee and charge a lower monthly rate than that for a small rural health provider who pays a month-to-month rate for services.

In addition to problems with benchmarks, the program's eligible telecommunications carriers (ETCs) and eligible services may be too narrowly defined. For example, the program excludes the participation of Inter Exchange Carriers, (IXCs) that provide the critical link between Local Exchange Carriers (LECs) in rural areas. It also excludes alternative local carriers such as

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Health Resources and Services Administration . U.S. Department of Health & Human Services

wireless companies that may provide needed competition to the LECs. Moreover, the program's eligible telecommunication services do not cover important services such as toll services or the distance component of ISDN or frame relay that are critical to many telemedicine projects and often more costly for users in rural areas.

To date, only a handful of rural health providers have been able to complete their applications for a discount rate. Because of the multiple steps involved in the application process, a number of rural health providers have submitted their application but are still in the process of negotiating rates with their telephone company providers. Since the rural telephone companies must also fill out their own separate application, many OAT grantees have reported spending long hours educating their local telephone companies about the program. Without significant competition in rural markets for telecommunications services, these LECs do not have great incentive to participate in the program given the amount of time and resources that is required to complete the applications. According to the Rural Health Care Division (RHCD) of USAC, they are not aware of any rural health providers who have received competing bids, to date.

To shed greater light on the application process problems facing our grantees, the University of Missouri asked OAT grantees to share their experiences. The University hosts a listserv for OAT grantees and compiled comments from 21 of them,[1] which represent telemedicine "hub" sites serving numerous rural health providers. The "Universal Service Fund Assessment" by the University of Missouri is attached.

The University found that a large number of OAT grantees face urban benchmark rates above their own telephone company rates, thus yielding a negative discount rate. More specifically, of the 21 telemedicine hub sites that commented, 17 were aware of the "urban" benchmark rate for their area. Of the 120 T1 connections reported by these 17 sites, the "urban" benchmark rate was higher than the rate currently paid for by 55 connections (46%) and was the same rate for 4 connections (3%).

Aside from the process problems facing the grantees, there are also systemic problems with the program. For example, the original Telecommunications Act of 1996 assumes that competition for telecommunications services will be prevalent in rural areas as of 1998. In fact, OAT is not aware of any competition for telecom services in any of its grantees' rural areas. Without competition in their markets, rural telephone companies do not have an incentive to bid for rural health provider services or participate in the program.

OAT grantees are also concerned about the impact of excluding IXCs from the Universal Service Program. In places such as Alaska or the Pacific Basin, IXCs may be the only providers available for telemedicine services. Some of our grantees have provided the following illustrations of their predicament:

---

[1] A total of 21 telemedicine "hub" sites commented on the Universal Service Program on a listserv hosted by the University of Missouri. These "hub" sites are typically the managing entity and largest provider of specialty services within their respective telemedicine network. These 21 "hubs" represent a total of 244 different telemedicine sites in Maine, Illinois, Tennessee, Kentucky, Montana, West Virginia, Missouri, North Carolina, Louisiana, Arkansas, New Mexico, Washington, Virginia, Michigan, Colorado, South Dakota, Nebraska, Arizona, and Wisconsin.

The WWAMI Rural Telemedicine Network

The WWAMI Rural Telemedicine Network serves a five-state region (Washington, Wyoming, Alaska, Montana and Idaho) that geographically covers 20% of the continental United States and is vastly either rural or frontier country. This region is noted for its rugged terrain and diverse climatic conditions, which vary from mild temperatures along the Pacific coast to extremes of heat and cold in portions of Alaska and on the great plains of eastern Montana. This area also houses the nation's highest mountain chains, which are often impassible from fall to spring.

One half of WWAMI's network partners are ineligible under the current FCC regulations because they use either AT&T, Sprint, or other long-distance carriers. The most remote and most active site has a monthly line charge of $1,250 for its AT&T-supplied Switch-56 lines, and the others have bills that range from $280-$1,120 per month (all of which are either ISDN or Sw-56 lines). As with most federally funded demonstration projects, the funding agency is very interested in seeing the grantee develop a program that will be self-sustaining at some point in time. Thus, one of the stated goals for the project was to develop a network where the rural partners could continue to operate their equipment without financial assistance from the University of Washington after the grant ceased to exist. This is the reason the program purchased equipment that was lower-end in bandwidth and a bit more affordable. However, these efforts will be for naught if there is no rate relief provided to its most financially and geographically vulnerable network partners.

Arizona Telemedicine Project

One of the areas in the state with the greatest need for telemedicine is the northeast corner, which falls within the Navajo and Hopi reservations. This is a region of more than 25,000 square miles with a low population density and very limited services. Distances are great and access to specialty health care services is a problem. The Arizona Telemedicine Program currently serves two sites in this region and there is a great deal of interest from other sites. For this region, they have no choice but to use an IXC, and in fact only a single IXC responded to an RFP for these services. That IXC has to work with four different LEC's to provide dedicated T1 circuits. These circuits are the most expensive circuits at approximately $5,000 per month for each site.

The exclusion of IXCs (from the Universal Fund) costs the program a minimum of $100,000 per year. This cost presents a significant barrier to the sustainability of the Arizona program. The fact that it can only use an IXC in that region, coupled with the exclusion of IXCs (from the program), will diminish the ability to expand what has been a very successful application of telemedicine in a region with very high need. This exclusion also means that these sites of high need are at the top of the list for downsizing should they encounter a reduction in funding.

Possible Options

Create New Benchmarks. The current RHCD benchmarks are published telecommunications tariffs that reflect the month-to-month or "list" price rather than the actual longer-term "discount" prices negotiated by large urban health providers and their telecommunications companies. Consequently, in many instances, rural health providers find that their own actual prices for telecommunications services are either lower or close to the published urban tariffs. Therefore the "real" discount to the rural health provider may be negligible.

- One way to address this problem is to develop benchmarks that better reflect the longer term negotiated urban telecommunications rates between urban health providers and their

local telephone companies. To assess these rates, the FCC might enlist a third party organization like the Chamber of Commerce that could survey health providers and their telephone companies in a select urban area. Using this pilot project to refine the data collection methodology and analysis, this third party would create a model that could be repeated nationwide.

Clearly, benchmarks will change as the technology and related prices change. More importantly, as local competition becomes more prevalent in different urban markets, prices should decline. At this time, however, most rural health providers have only monopoly local telephone providers, available.

Streamline the Application Process. Streamlining may attract more health care applicants or encourage more telephone companies to participate in the program and allow them to complete their applications in a shorter time frame.

- One possible way to simplify the process would be to offer rural health providers and telephone companies the option to jointly file their application, particularly if there is limited competition for services. This option would eliminate the 28-day posting period.
- Another option would be to allow the rural health care providers to bid directly for services among competing telecom providers (if they exist) and then choose the best provider. A small portion of the Universal Service funds could be used for rural health care providers' administrative fees to cover the costs of bidding.

Expand the Definition of Eligible Telecommunications Carriers, Eligible Telecommunications Services. OAT supports the USAC report's recommendation to expand the definition of Eligible Telecommunications Carriers and Eligible Telecommunications Services.

- The majority of our 41 OAT grantees and their more than 300 telemedicine sites are affected by the exclusion of IXCs from the definition of eligible telecommunications carriers.
- Inter Exchange Carriers may be the only available carriers in places such as Alaska, the Pacific Basin or very rural parts of mainland America.
- Expanding eligibility to alternative local carriers such as wireless or cable companies may provide needed competition for LEC services to rural health providers.
- Expanding the definition of eligible telecommunications services to include toll access or the distance component of services such as ISDN or frame relay, which can be prohibitively expensive for users in rural areas and would also increase access to services critical to rural telemedicine projects. Our grantees have found that in some cases, advanced technology has allowed them to move from dedicated T1 lines to other options such as ISDN for the same telemedicine applications.

Other Issues

Alaska Solution. Although some rural areas served by small independent rural telephone companies may be able to use this solution, OAT does not believe that the "Alaska solution" will

be viable for most of the lower 48 states, because Regional Bell Holding Companies currently are not allowed to resell their telecom services.

Third Party Payment and Attestation. In order to capture economies of scale benefits, the majority of OAT grantees are organized into "hub and spoke" configurations. Consequently, rural health provider spokes often use telecommunication infrastructures ultimately built out by - and paid for by the "hub" site. While this configuration provides economies of scale and other efficiencies, it raises some difficult questions for the FCC and RHCD. One concern voiced by the FCC is the issue of third party payment. That is, the FCC must be certain that the LEC receive subsidies only for services to appropriate rural spoke sites. If the LEC charges the urban hub for telecom services received by the rural spoke site, the FCC cannot be sure that the telecom subsidy is used only for the rural spokes sites and not for the urban hub site.

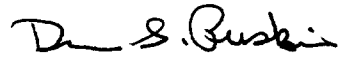
- One way to address this dilemma is for the hub site in a consortium to attest on their application that they are applying for a discount on behalf of their member rural sites and that they are seeking a discount only for those telecommunications services used by the rural sites. All members of the consortium would sign the application and attestation. Periodic or random audits by the FCC or the RHCD could be used to verify all claims made by the hub sites.

Technical Advisory Group. The FCC, in cooperation with the RHCD, might convene a small group of telecommunication and telemedicine experts at the Commission to brainstorm "technical fixes" to the program (e.g., calculation of the benchmark). Given the rapidity in technology advances, this group could also provide guidance for expanding eligible telecommunication services. As noted above, our grantees have found that advanced technologies have allowed them, in some cases, to move from T1 lines to ISDN or other venues over the past five years.

Statutory legislative changes. Long-term health care providers and rural health care practitioners in private practice (considered for-profit by the IRS) serve a large percent of rural dwellers, consequently, the FCC should consider working toward legislative changes that extend eligibility to these rural health care givers. Furthermore, the FCC should consider extending eligibility to emergency medical service, key providers of service in rural communities.

Thank you for the opportunity to comment on the comprehensive USAC report to the FCC. I hope that our suggestions prove helpful and provide you with some insights into the needs of our constituents.

Sincerely,



Dena S. Puskin, Sc.D.
Director
Office for the Advancement of Telehealth

cc: Sheryl Todd

Common Carrier Bureau
Federal Communications Commission
2100 M. Street, NW, 8th Floor
Washington, DC 20554

International Transcription Service
1231 20th Street, NW
Washington, DC 20554

University of Missouri

Universal Service Fund Assessment Results

October 12, 1998

Executive Summary

The results of the Universal Service Fund assessment illustrate several important points that the FCC and RHCC should consider. They are:

- The continued exclusion of the inter-exchange carriers (IXCs) from participating in the USF program will have a negative impact on many telemedicine programs. That is, many telemedicine sites may not be able to continue in their current telemedicine program unless their IXC is allowed to participate and the site receives a discounted rate for their telecommunication services.
- There is no doubt the USF program can have a tremendous impact on the sustainability of existing networks. This can be inferred from the fact that 51% of the existing T1 lines reported in this assessment currently cost more than they will under the "urban" rates as defined on the RHCC web site. In many of these cases the "urban" rate is much less than the rate currently paid by many sites.
- Applications from consortia appear to be more popular among the respondents than applications filed individually. This is evidenced by the fact that 62% (13) of the telemedicine program hubs report having filed as a consortium, with one site noting that it would file as a consortium in 1999. Several sites commented that filing as a consortium provides more efficiency in the process.
- The USF program is significantly late in delivering on the discounted rates for healthcare. This is evidenced by the fact that the USF program was to have started in 1997 but as of late 1998 only one telemedicine site within one telemedicine program (in this assessment) has reported being notified of funding under the program.

Introduction

An assessment of the Universal Service Fund (USF) was conducted by the University of Missouri Health Sciences Center in an effort to gain an understanding of how it is currently impacting telemedicine programs throughout the United States and what concerns telemedicine programs have about the Fund. It was also conducted to pilot test the instrument so that it could be refined and sent to a broader sample of telemedicine programs throughout the country.

An assessment instrument was created and sent to all Office for the Advancement of Telehealth (OAT) funded telemedicine projects on October 12, 1998 via the telemedicine listserv managed by the University of Missouri Health Sciences Center. A copy of the assessment is provided in Attachment A.

Below are the preliminary results of the assessment. They are preliminary for two reasons. First, the results only represent the responses of the telemedicine programs that were able to answer within a week of receiving the survey. Second, only descriptive statistics are included in this summary.

Results

- A total of 21 telemedicine "hub" sites responded to the assessment. The "hub" sites are typically the managing entity and largest provider of specialty services within their respective telemedicine network. These 21 "hubs" represent a total of 244 different telemedicine sites in Maine, Illinois, Tennessee, Kentucky, Montana, West Virginia, Missouri, North Carolina, Louisiana, Arkansas, New Mexico, Washington, Virginia, Michigan, Colorado, South Dakota, Nebraska, Arizona, and Wisconsin.
- Dedicated T1 lines and fractional use of those lines seem to be the preferred method of telecommunication services for these networks. A total of 139 T1 lines were reported deployed in the various telemedicine networks.
- Respondents were asked to provide the cost of their most and least expensive lines. The results indicate that the T1 lines range anywhere from $200 per month ($2,400 per year) to $5,140 per month ($61,680 per year). The median value for the least expensive line was $803 per month and the median value for the most expensive line was $1,728 per month.
- Of the 145 long distance lines used in the various telemedicine networks, 80% (116) used AT&T as the long distance carrier.
- Consortium applications (Form 465) were filed by 13 (62%) of the 21 telemedicine programs completing this assessment. Of those 13 applications 9 have been approved, 3 are pending and the status of 1 is unknown at this time.
- Of the 13 telemedicine sites that filed consortium applications, 38% felt that if the FCC were to stop accepting applications from consortia it would not affect their telemedicine network, 31% felt that it would have some effect and 31% were not sure how this would impact their telemedicine program. Six programs provided additional comments (see Attachment B) on this topic with three citing that elimination of consortia applications would result in some inefficiency in the process due to rural sites not being as astute in the application process as the "hub" site.
- Individual applications were submitted by 49 (65%) eligible sites whose networks also contained an additional 26 sites (35%) that were ineligible for the USF program. Of those 49 eligible applications 16 (33%) have been approved, 25 (51%) are pending, and there was "no response" given for the remaining 8 (16%) applications.
- Of the 8 telemedicine program hubs reporting that their sites filed for the USF program individually, 6 of the hub sites helped the rural sites complete the application, 1 hub did not help, and one hub did not respond to the item.
- Seventeen (17) of the telemedicine hub sites were aware of the "urban" rate for their area. They were asked to compare that rate with what they were already paying for telecommunication services. The results indicate the following (*results consider T1 service only --- 120 T1 Connections*):
    - Of the 120 T1 connections reported by these 17 sites, the "urban" rate was higher than the rate currently paid in 55 cases (46%), the "urban" rate was lower than the current rate in 61 cases (51%), and in 4 cases (3%) it was about the same.
    - Four telemedicine programs did not apply for funding because the rates already being paid for the combined 33 T1 connections in their networks were less than the "urban" rate reported by the RHCC. This represents 28% of the total T1 connections (120) deployed by the 17 reporting sites.

  - Four telemedicine programs indicated that in 22 occurrences (18%) the "urban" rate was higher than what was currently being paid, but that in 32 instances (27%) the "urban" rate was lower than what was currently charged for telecommunication services in their programs.
  - Five telemedicine programs reported that the "urban" rate was lower than the rate currently paid for each (29) of their T1 connections.
  - The remaining four sites who were aware of their "urban" rate were using ISDN exclusively (3) or were unable to respond to the item (1).
- Respondents were asked if the continued exclusion of the long distance carriers as ETCs (Eligible Telecommunication Carrier) would affect their telemedicine network. The results indicate that 71% (n=15) of the 21 responding telemedicine programs felt that the exclusion of the long distance companies from the USF program would affect their programs, 10% were not sure how this would impact their program, and 19% said the exclusion of the IXCs would have no impact. To put this in perspective, 85 (61%) of the 139 T1 lines reported in this study are serviced by long distance companies.
- Attachment C provides written comments regarding the exclusion of the long distance carriers from the current USF program. A quick review of these comments suggests that if the IXCs continue to be excluded from the USF, many programs may have to eliminate sites from their telemedicine network.
- Respondents were asked if they attempted to negotiate a special discount or tariff for their respective telemedicine network. The results indicate that about 50% of the sites (10) did talk with their phone companies about this issue. Three sites were successful in creating a special rate for telemedicine, while 6 sites were unsuccessful in their bid to create such a rate. One site is still in negotiations on the matter.
- Respondents were asked if their respective public utilities/service commission created a special transmission rate for telemedicine. The results indicate that only two PUC/PSCs (Arkansas and Louisiana) of the 19 States represented created such a rate.
- Of the 13 programs who report that their Form 465 was approved by the RHCC, 8 (61%) report that their phone companies have not yet completed Form 468, while 5 (39%) programs have reported the Form 468 has been completed by their telephone company(ies). Of the 5 programs who have had Form 468 completed, 3 have submitted the 468 along with Form 466 to the RHCC and <u>one</u> site has been notified of funding.

Monthly Telemedicine Utilization Data

- **Teleradiology Cases** (n=10)
  - Median = 30 cases per month
  - Range 1 to 305 cases per month

- **Interactive Consultations** (n=20)
  - Median = 25 cases per month
  - Range = 3 to 130 cases per month

- **Store and Forward Consultations** (n=6)
  - Median = 18 cases per month

    - Range = 2 to 40 cases per month

- **Educational Programs** (n=18)
    - Median = 18 programs per month
    - Range = 1 to 165 per month

- **Administrative Use of the Network** (n=15)
    - Median = 11 administrative events
    - Range = 3 to 75 administrative events

Attachment D provides additional comments provided by eight telemedicine programs. They also include comments from the Midwest Rural Telemedicine Consortium in Iowa whose other results are not included in the statistics because they reached the University of Missouri after the preliminary analysis was complete. The comments are varied in their content but provide meaningful information that the FCC and RHCC should consider.

ATTACHMENT A
THE USF ASSESSMENT FORM

Universal Service Fund Assessment for Telemedicine Project Directors
October 2, 1998

In an effort to assess the impact of certain aspects of the Universal Service Fund (USF) for Healthcare, we would like the project directors from all Office for the Advancement of Telehealth (OAT) funded telemedicine projects to provide responses to the following items. This information is important for two reasons. First, it will provide critical feedback to the FCC, and Rural Health Care Corporation from individuals who actually provide telemedicine services. Second, understanding the impact of the USF on our individual telemedicine programs has major implications for our own budgets and for the OAT, which funds a major portion of our telemedicine programs.

The information gathered will be tabulated and the responses will be made available on the Missouri Telemedicine Network WWW site and in the listserve archives.

PLEASE NOTE THE FOLLOWING IMPORTANT INFORMATION:

1. **If you are a "Rural Telemedicine Grant Program" recipient, only the director of the telemedicine network hub site should complete the assessment.**

2. **If you are a "Rural Health Outreach Grant" recipient, please have the director of the hub site complete the assessment.**

3. **PLEASE SEND YOUR RESPONSE TO tracyj@health.missouri.edu. DO NOT SEND YOUR RESPONSE TO THE LISTSERVE ADDRESS. You can also FAX your response to Joe Tracy at (573) 882-5666.**

4. **Responses are due by October 9, 1998.**

Thank you.

Joe Tracy
Director of Telemedicine
University of Missouri Health Sciences Center

1. What is the name of your telemedicine network? _____

2. Which of the following grant programs fund your telemedicine network?

Rural Telemedicine Grant Program _____
Rural Health Outreach Grant Program _____

3. How many sites are part of your telemedicine network? _____

4. How many of these sites serve as.....

   Hub Sites: _____ Spoke Sites: _____ Hub & Spoke Sites: _____

5. How many and what kind of transmission links are used by your network for delivering telemedicine services?

Number of Lines	Type (T1, ISDN, ATM, POTS, etc.....)	Speed (Kbits/ per sec)	Monthly cost of your **most** expensive link	Monthly cost of your **least** expensive line	Avg. Mthly. Connect Time Charges
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

6. Of the above links, how many involve a long distance carrier and which carrier is used?

Number of Lines Using a Long Distance Carrier	Name of Long Distance Carrier Used
_____	_____
_____	_____
_____	_____
_____	_____

7. Did your telemedicine network apply as a consortium for reduced rates under the Universal Service Fund?

   Yes _____ No _____ (***go to #10***) Don't Know _____ (***go to #10***)

8. What is the status of your application (Form 465)?

It was approved _____
It was denied _____
It is Pending _____
Don't Know _____

9. If the Rural Health Care Corporation (RHCC) stops accepting applications from consortia in 1999 and requires each site to apply individually, will this affect your telemedicine network?

   Yes _____ No_____ Don't Know _____

   If yes, please explain (***then go to # 14***)

10. In your telemedicine network how many eligible sites applied individually for universal service funding and how many sites were ineligible to receive such funding?

    # of Eligible Sites that applied _____

    # of Ineligible Sites _____

11. Do you believe there are eligible sites in your telemedicine network that did not apply individually but would have if a consortium (group) application had been submitted?

    Yes _____ No_____ Don't Know _____

    If yes, how many sites do you believe to be in this situation _____

12. Did you, as the hub site of your telemedicine network, assist the spoke sites in completing the individual applications?

    Yes _____ No_____ Don't Know _____

13. Please provide the number of individual site applications that were approved, denied or which may still be pending with the RHCC:

    Number Approved _____

    Number Denied _____ [please explain the reasons for denial below]

    Number Pending _____

    Explain all denials:

14. If long distance carriers continue to be excluded from participating in the Universal Service Fund program will this affect your telemedicine network?

Yes _____ No_____ (***go to #16***) Don't Know _____ (***go to #16***)

15. If yes to #14, please explain in detail the impact the exclusion of the long distance carriers would have on your telemedicine network.

16. Discounts provided by the Universal Service Fund are based on the highest tariffed rate charged for the comparable service in the nearest town of 50,000 or more residents. Do you know at this time what the comparable or base rates are for the types of telecommunication services used in your network?

    Yes _____ No _____ (***go to # 18***)

17. If yes to #16, how does the rate compare to what you have paid in the past or are paying for comparable telecommunication services? [Please fill in the blanks below with the number of sites which fit each situation]

    The rates are higher for _____ telemedicine site connections

    The rates are lower for _____ telemedicine site connections

    The rates are about the same for _____ telemedicine site connections

18. Did your telemedicine network attempt to negotiate a telecommunications rate specifically for telemedicine services?

    Yes and was successful _____
    Yes and was not successful _____
    No _____
    Negotiations in process _____

19. Did your state public utilities/service commission create a special transmission rate for telemedicine services?

    Yes _____ No _____ Negotiations in process _____ Don't Know _____

20. How many of the following services are currently provided by your telemedicine network on a monthly basis:

    Teleradiology Cases (may be multiple films per case) _____

    Interactive Clinical Patient Visits and Consults _____

    Store & Forward Patient Consults (exclude teleradiology) _____

Educational Sessions _____

Other (describe): _____

ANSWER QUESTIONS 21, 22 AND 23 ONLY IF YOUR APPLICATION (FORM 465) HAS RECEIVED APPROVAL.

---

21. Regardless of whether you applied as a consortium or individually, have your telephone companies completed and submitted Form 468 to you?

    Yes _____ No_____ (Go To #24)

22. If "yes" to question 21, have you completed Form 466 and submitted it along with Form 468 to the RHCC?

    Yes _____ No_____ (Go To #24)

23. If "yes" to question 22, have you been notified of funding?

    Yes _____ No_____

---

24. If you are a "Rural Health Outreach Grant" recipient, do any of your sites also serve as sites under the Rural Telemedicine Grant Program?

    Yes _____ No _____ Not Applicable _____

25. If there are any other issues that need to be addressed in regard to the Universal Service Fund please write them below:

ATTACHMENT B
COMMENTS REGARDING USF CONSORTIUM APPLICATIONS

Eastern Montana Telemedicine Network:

All telecommunications contact for EMTN are negotiated through the Hub-Deaconess Billings Clinic. Consortia application allows for efficient management of those contracts and the application process for USF. If each site is required to apply I would be concerned that the process would not get the attention it needs.

New Mexico Telemedicine Network:

During the next year, after all sites in network are on-line, we expect to apply as a Consortium to obtain USF discounts for those members who are otherwise ineligible.

High Plains Rural Health Network:

HPRHN will adapt to the change to make the program work with our consortia membership.

Upper Peninsula Telehealth Network:

Each organization may have several applications-one per each site. For example, our hub owns three rural health centers that have video conferencing lines. Each will require their own application. But this is not necessarily a bad thing.

Mid-Nebraska Telemedicine Network:

Creates complexity for rural spokes who have not dealt with the process. Most will ask us to complete anyway.

Missouri Telemedicine Network:

First, we will have to help complete applications for each and every network member. This is a waste of time and not an efficient way of handling the process.

Second, the idea behind a consortium is to create a network that shares "costs". That is, our intent is for each network site to pay the same "flat" network fee to participate because the network virtually eliminates the "distance" factor. This is possible when the hub site can manage all of the consortium's lines. When each site files separately, the "flat rate" concept will not happen!

ATTACHMENT C
COMMENTS REGARDING THE EXCLUSION OF LONG DISTANCE CARRIERS FROM THE USF PROGRAM

The Appal-Link Network:

Under the current arrangements, we could only receive US Fund support for the "local leg of the long distance connection." No one knows how much or what this means. We are struggling now to maintain this network. Currently, 8 sites contribute an equal share. This is a growing trend to consider dropping the entire project.

WWAMI Rural Telemedicine Network:

All of our sites must go through long distance carriers to consult with us. The cost is very prohibitive for most of them. The impact would be that they will likely have to pull out of the network if they do not receive rate relief.

High Plains Rural Health Network:

The LEC in the rural area cannot provide switched service. The only telecommunication providers can service the rural areas is the IXC's. But the cost of switched service is very expensive from the IXC's. The USFP is NEEDED!

New Mexico Telemedicine Network:

Some long distance carriers that have been excluded are local co-op's or carriers for these remote sites that require service. In the current case of USF some local co-op's are not eligible to support USF, leaving long distance carriers responsible for the support.

KY Telecare:

Added competition will reduce rates charged by the local telco's consortium.

Carle Rural Telemedicine Network:

The farthest spoke site costs almost $2000 per month for a T1 line. The majority of that line is carried by a long distance carrier, Consolidated Communications, which is ineligible. The only real way to continue our telemedicine network after the grant is over with that rural site (2 ½ hours away) would be to have support for that line. There really are no other alternatives because phone companies in Illinois cannot cross "LATA's" to provide services that aren't in their territory.

Upper Peninsula Telehealth Network:

We have ISDN lines centrexed into the hub so there are no connection charges between network sites. We will be adding additional sites and are being told the same arrangement that was made for existing sites will not be available for new sites. One of our sites chose to use a local ISDN service and they pay LD charges to connect each time.

Mountaineer Doctor Television:

The cost will force MDTV to change carriers, band width used: all to lower cost. We hope this does not cause interruption of service for telemedicine in the state.

UAMS Rural Hospital Program's:

It would isolate the existing statewide network into three individual LATA's. This would essentially create three independent networks with no ability to communicate between one another.

REACH-TV:

We would probably lose several remote sites due to not being able to sustain transmission costs, including our most active rural spoke site.

Mid-Nebraska Telemedicine Network:

Has provided difficulty in getting response. AT&T is not an ETC. Have solicited (finally) another carrier.

Arera McKennan Telemedicine Network:

We would not qualify for any discounts (ISDN is currently excluded anyway).

Missouri Telemedicine Network:

Eleven of our T1 lines use AT&T and typically connect sites farthest from MTN. These lines are generally the most expensive given what the LECs charge AT&T for "access". The current USF policy systematically prevents the program for supporting these sites and they are the ones that benefit the most from the network. If these lines are not eligible for discounts then the probability of eliminating network sites, because of cost, increases dramatically.

ATTACHMENT D
GENERAL COMMENTS ON THE USF PROGRAM

Video Link of St. Peter's Network:

US West has had our application for months with no response back from them. Frustrating!!!

The Appal-Link Network:

Although we have been approved for four months we have no movement on receiving any support. No contacts from RHCC. The estimated support based on the local costs, not long distance, is not worth the hassle. We have no idea who to talk to or where to go from here.

New Mexico Telemedicine Network:

We understand that New Mexico has the second highest number of initial applications submitted. Many of these applicants, however, have not been able to complete the process. The obstacles include:

- Local phone carriers or phone co-ops who have been determined to be ineligible.
- Local phone carriers who do not understand the process and are not responding to applicants.
- Local phone carriers who believe it is not in their financial interest to receive these funds or who regard the process as burdensome.

UNM is supporting a proposed conference to help applicants, telcos and other stakeholders better understand USF. The tentative date is in early November. The involvement of RHCC in this conference is essential, particularly in helping support the rural telcos and identifying their issues.

High Plains Rural Health Network:

Issues that need to be resolved with the Universal Service Fund program:

Circuits and Contracts: the only circuits that have been installed within the telehealth network that are under a contract are the only circuits that will be funded. I have circuits that are no longer under contract with the carrier but are still being used today for telehealth. The circuits that are not under a contract should be covered by the Universal Service fund because they are still providing the same medical services that they were when they were under contract. Please understand it is hard for a rural/frontier hospital or clinic to justify signing a three or five year contract to a

telecommunication provider for a service that is very costly in the first place, when they don't know if their doors will be open tomorrow due to their in and out patient needs.

Interexchange Carriers (IXC): the Local Exchange Carriers (LEC) do not provide switched service in the rural locations they service and they DO NOT plan on investing the money capital to make it happen for rural America. The ONLY way we can have switched services is to use the IXC that will provide the service for us. The switched service is costly from the IXC, but we can receive the service from someone other than the LEC.

I believe that not all the hospitals and clinics in the nation were going to apply for the Universal Service Fund program this year due to the timing of the Rural Health Care Corporation (RHCC) finally coming online and informing the users of the program. The RHCC was supposed to be fully functional of January 1, 1998 but didn't get announced until past mid year. The organizations who saw this coming were not banking on the program to be working this year and waited to apply for 1999 funding. Each health care facility in the nation had to evaluate their telemedicine project and then re-evaluate it to fall into the infrastructure guide lines of the RHCC in order to receive the funds and get the lower transmission costs. I believe that as 1999 rolls around, 90% of hospitals and clinics will apply for receive the funds and lower transmission costs for telehealth.

KY TeleCare:

KY's "state rates" are lower than the "highest tariff rates" that are the baseline for USF subsidies and when the subsidies are included, these rates are still higher than the "state rates". Competition from the IXC's would help put pressure on the consortium of BellSouth/GTE and other LEC's that offer the state information highway infrastructure.

REACH-TV:

The main problem has been the delays in getting the program off the ground. Transmission costs are a significant factor for our telemedicine program and not having firm dates and cost figures makes budgeting and business planning more difficult as we transition from a grant funded program to a self sustaining program. Sprint has been a bit slow responding and they have been confused at times. We also applied separately, rather than as a consortium and this has meant a great deal of work assisting our remote sites with the paperwork.

Arera McKennan Telemedicine Network:

ISDN lines aren't eligible. That is 90% of what we use. Currently the USF will not benefit us at all.

Missouri Telemedicine Network:

The Telecommunication Act of 1996 has done nothing thus far to increase competition in Missouri. As such we're still stuck with a LATA structure which is completely brain dead. I wish someone could provide me with one good reason why a T1 between Columbia, Missouri and Mt. Vernon, Missouri (200 miles) costs $120 per mile per year, but a T1 between Columbia, Missouri and Fulton, Missouri, which is a fraction of that distance (30 miles), costs $714 per mile per year. As a general consumer of telecommunication services you have to shake your head at something like this.

It's "ok" for schools and libraries to use IXC's in the Universal Service Fund program but not healthcare facilities! Explain that one to me, all the other telemedicine networks, rural hospitals throughout the country and especially the rural patients they serve.

Using the "highest" tariff to figure the discounts is not a good idea. How many urban organizations actually pay the "highest" tariff in the urban areas? I'll bet not many.

This program is very late on delivering what Congress had intended for it to deliver. As such, this program is not only creating difficulties with developing my own telemedicine budget but it must also be creating problems for the Federal agencies who fund the telemedicine networks throughout the country. How can we or the Federal agencies budget the most expensive part of our networks (telecom charges) without knowing what its going to cost us at any given point.

Midwest Rural Telemedicine Consortium

The identified Urban Rate Database on the RHCC web page for the state of Iowa identifies eight (8) Metropolitan Services Areas (Cedar Rapids, Council Bluffs, Davenport, Des Moines, Dubuque, Iowa City, Sioux City, and Waterloo) which are serviced by the Local Exchange Carrier US West. The problem arises from the lack of choices to select for telecommunication services. Additional "other telecommunication services" (e.g. ISDN-PRI, ISDN-BRI, 56kbps and T1 frame-relay and etc.) should be implemented because services may be less expensive than "T1 - 1.544 and DDS 56kbps.

If the RHCC is using T1 - 1.544 and DDS 56 kbps to cover the multiple options of telecommunication services, how did the RHCC come up with the Urban Rate for Iowa? Case in point, the Urban Rate Database indicates that any of the MSA sites mentioned above average out to $1,200.00 for a Nonrecurring Charge (this appears to be an installation charge) and $483.00 for a Monthly Recurring Charge (this appears to be what is known as a transport charge). As indicated above, US West services all eight MSA sites. For the same type of service that the MRTC utilizes (ISDN-PRI or DS-1), US West charges $626.50 for a Nonrecurring Charge and $230.00 for a Monthly Recurring Charge for a month-to-month service. Can the FCC, RHCC, or any other group explain this discrepancy?