Quarterly Data Report Requirements

APPENDIX D – Pages 73-75 of Federal Communications Commission FCC 07-198

WC Docket #: 02-60
Northwestern Pennsylvania Telemedicine Initiative

1. Project Contact and Coordination Information

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201 State St
Erie, Pa 16550
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Organization that is legally and financially responsible for the conduct of activities supported by the award.

HAMOT HEALTH FOUNDATION

Explain how project is being coordinated throughout the state or region.

Representatives from the information systems departments, as well as administrative staff, have been hosting regular meetings to evaluate the needs of their respective entity. These needs have been reviewed and taken into consideration as a network is being designed.

2. Identify all health care facilities included in the network.

a. Provide address (including county), zip code, Rural Urban Commuting Area (RUCA) code (including primary and secondary), six-digit census tract, and phone number for each health care facility participating in the network.

   Hamot Medical Center
   201 State Street
   Erie, Pennsylvania 16550
   Erie County
   Census Tract: 0004.00
   RUCA: 1
   814-877-6000

Not-for-profit, public and eligible

Bradford Regional Medical Center
116 Interstate Parkway
Bradford, Pennsylvania 16701
McKean County
Census Tract: 4204.00
RUCA: 4
814-368-4143
Not-for-profit, public and eligible

Kane Community Hospital
4372 Route 6
Kane, Pennsylvania 16735
McKean County
Census Tract: 4211.00
RUCA: 7
814-837-8585
Not-for-profit, public and eligible

Johnsonburg Health Center
81 Clarion Rd
Johnsonburg, Pennsylvania 15845
Elk County
Census Tract: 9905.00
RUCA: 7
814-837-4513
Satellite of Kane Community Hospital: Not-for-profit, rural health clinic, eligible

Kane Medical Park - Ridgway
225 South St
Ridgway, Pennsylvania 15853
Elk County
Census Tract: 9904.00
RUCA: 7
814-837-4513
Satellite of Kane Community Hospital: Not-for-profit, rural health clinic, eligible

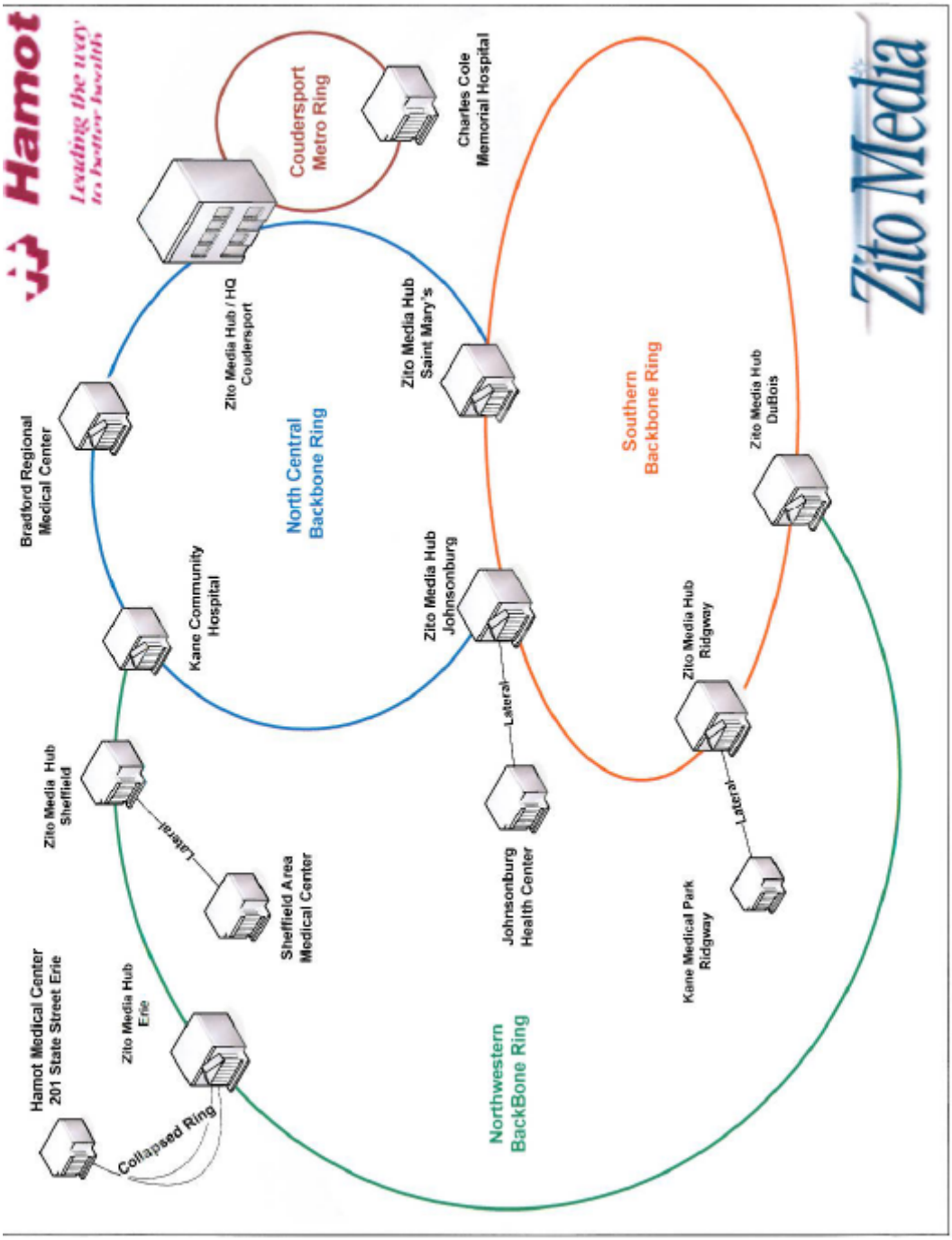
Sheffield Area Medical Center
511 South Main St
Sheffield, Pennsylvania 16347
Warren County
Census Tract: 9712.00
RUCA: 5
814-837-4513
Satellite of Kane Community Hospital: Not-for-profit, rural health clinic, eligible

Charles Cole Memorial Hospital
1001 East 2nd Street
Coudersport, Pennsylvania 16915

Potter County
Census Tract: 9503.00
RUCA: 10
814-274-9300
Not-for-profit, public and eligible

3. Network Narrative: In the first quarterly report following the completion of the competitive bidding process and the selection of vendors, the selected participant must submit an updated technical description of the communications network that it intends to implement, which takes into account the results its network design studies and negotiations with its vendors. This technical description should provide, where applicable:

Zito Media Commercial Voice, LLC will provide complete Optical WAN Data Connection from the telecommunication site at 201 State St, Erie, PA to the designated endpoints. The 201 State St, Erie location will have a 1 GIG connection. The following endpoints will be served with a 100 MEG connection back to the 201 State St location:
Kane Community Hospital, Bradford Regional Medical Center, Charles Cole Memorial Hospital, Kane Medical Park, Johnsonburg Health Center and Sheffield Health Center. The facility at 201 State St, Erie will provide complete optical ring redundancy outside the city of Erie and throughout the distribution area. Redundant lateral will be supplied into Kane Community Hospital, Bradford Regional Medical Center and Charles Cole Memorial Hospital. The remaining sites will be provided with a lateral from the local metro ring in the respective community.
Zito Media Commercial Voice, LLC will provide an Ethernet handoff at each location to connect to their local premise-based LAN networks.
Each of the three (3) hospital partner locations (Kane Community, Bradford Regional, Charles Cole Memorial) already have Zito Media Commercial Voice optical fiber built into their premises. They will be supplied with diverse optical laterals into their building. The three (3) remaining locations will be supplied with lateral feeds either from the associated local Metro ring or directly out of the local hub (see diagram). The main termination site at 201 State St, Erie will have a collapsed ring that will travel underground in protected conduits to the local POP. All fiber is buried. The Erie fiber will be leased by Zito Media Commercial Voice from a local provider. Zito Media Commercial Voice, LLC owns the McKean, Elk and Potter County infrastructure and last mile application. There will be no fiber construction involved with this project as it currently stands.
At this point, there are no plans to connect to a national backbone such as NLR or Internet 2.



4. List of Connected Health Care Providers: Provide information below for all eligible and non-eligible health care provider sites that, as of the close of the most recent reporting period, are connected to the network and operational.

At present, there are no provider sites that are connected to this network system and operational. The expectation is that the network will be operational by 12/09.

5. Identify the following non-recurring and recurring costs, where applicable shown both as budgeted and actually incurred for the applicable quarter and funding year to-date.

No expenditures to date.

6. Describe how costs have been apportioned and the sources of the funds to pay them:

No expenditures to date.

7. Identify any technical or non-technical requirements or procedures necessary for ineligible entities to connect to the participant's network.

At this point, we have no ineligible healthcare entities in our plans.

8. Provide on update on the project management plan, detailing:

The project and leadership team:

Steering Committee Members/Leadership:

John Malone	CEO, Hamot Medical Center
Gary Maras	Vice-President – Business Dev. Director, Hamot Heart Institute
Ed Pitchford	President/CEO, Charles Cole Memorial Hospital
J. Gary Rhodes	CEO, Kane Community Hospital

Overall Project Management:

<u>Hamot Medical Center/Medicor Associates/Northshore</u>

Valarie Jackson	Project Manager
David Wilcox	Director, Information Systems
Mark Silvaggi	Information Systems
Linda Offner	Northshore Clinical Associates, Operations Director

<u>Kane Community Hospital and Satellites</u>

Margaret Twidale	Information Systems
Dino Cherry	Information Systems

<u>Bradford Regional Medical Center</u>

Terry Palmer	Director, Information Systems
Thomas Marsh	Information Systems
Tim Brown	Director, Radiology Services

<u>Charles Cole Memorial Hospital</u>

Netra Baker, RN	Director of Staff Development
Thomas Lamb	Information Systems
Mark Close	Information Systems

An RFP was constructed and has been posted for bids effective 3/26/09. The sustainability plan was approved in advance of the RFP posting. A contract with Zito Media Commercial Voice, LLC was signed on 6/18/09. Because of the time required to "build' the fiberoptic network and the desire for the hospitals to proceed with connectivity and a telemedicine application, it appears that the network will start with VPN connection and migrate to the fiberoptic network once it is completed.
Also listed in our FCC application was a desire to connect to the State Correctional Institutions to provide telemedicine evaluation. Currently, these facilities utilize ISDN capability to connect with each other and there is no ability to place a T-1 line. Therefore, an ISDN line will have to be obtained to allow for telemedicine consultation.

9. Provide detail on whether network is or will become self sustaining. Selected participants should provide an explanation of how network is self sustaining.

The Telemedicine cost center at Hamot Medical Center has been recognized as an additional access point for specialty care and distance learning. Since the inception of the telemedicine pilot project in 2006, it has never been a revenue-generating cost center. Each year, monies are budgeted for capital and minor equipment, education, recurring telecommunications costs and equipment maintenance. With rare exception, Hamot Medical Center has absorbed the cost of everything to begin and sustain the telemedicine program. It is accepted within the hospital system that the benefit of having connectivity to provide rural hospital systems with needed specialty services and staff /physician education is a stronger relationship with these institutions. Tertiary referrals (primarily cardiac) generated from consultations that might not have otherwise taken place can provide indirect revenue to the Hamot Medical Center system and provide justification to continue to invest in the program. Procedural revenue generated from referrals from the telemedicine project will help to offset the costs of the proposed telemedicine program. For example, indirect revenue to Hamot Medical Center from cardiac procedures has been projected at an estimated:

-$107,308 for the first year
-$139,319 for the second year.

These figures are based upon results obtained from our rural outreach clinics regarding the number of patients seen and the diagnostic procedures and treatments (cardiac catheterization/intervention/cardiac bypass/valve surgery) that are generated as a result of those visits.

Regional hospitals will realize revenue from additional testing from the specialty evaluations and disease management programs. Laboratory tests, x-rays, EKGs, holter monitors, event monitors, EEGs, and CT/MRI scans may be ordered.

The rural/regional hospitals may also realize savings from less travel expenses and overnight accommodations associated with CME programs.

At this point, there are no plans to charge participating hospitals for telemedicine-related services. Given the current economic climate, it makes the most sense to share those services – like distance learning – that are already prepared for programs at Hamot Medical Center. Hamot

Medical Center has regularly scheduled Grand Rounds, Nursing Lunch and Learns and Respiratory education. Other programs such as Leadership training have been requested by the administrative teams in the rural hospitals and will also be provided.

Rural Hospital Savings and Responsibilities

Two of the three major hospital systems participating in this project are looking for ways to better manage their costs, make an impact to their bottom line and align themselves with a larger hospital system. What started as a fairly focused telemedicine project has generated conversation and discovery about other services that may be conducted and shared across the telecommunication lines. For example, one such discovery was related to after-hours pharmacy coverage. Two of the hospital systems had contracts for service with other organizations. After discussions began to take place around clinical telemedicine, it was discovered that Hamot Medical Center could provide that same service for nearly $50,000 less – a figure nearly equivalent to their bottom line. Hamot Medical Center had the technology and the staff but had never considered sharing services until recently. There are other such synergies in care and process that currently being discussed. Each will help streamline patient care and reduce the duplication in services that each facility currently has. None of this would have been considered without the pending implementation of telemedicine connectivity link.

Each partner hospital, of course, will provide space and renovations of that space to accommodate telemedicine activities. They also provide the personnel necessary to conduct the specialty evaluations. Each facility will be responsible for preparing their facilities for the connectivity line – routers, inside wiring, etc.

Grants

In addition to the FCC grant, Hamot Medical Center was able to secure a RUS grant that provides funding for equipment necessary to provide consultations and distance learning. It is a matching grant – totaling $192,406 – that will be utilized over the next three years to purchase videoconferencing equipment and peripheral devices. Because it is a matching grant, Hamot Medical Center must demonstrate purchases exceeding $192,406 in the telemedicine cost center. Hamot Medical Center will continue to pursue grants to ease the burden of providing telemedicine services.

Statement of Telecommunication Need and Current Experience

According to preliminary estimates regarding the cost of the telecommunications lines, Hamot Medical Center is prepared to budget for the cost of fiberoptic connectivity. In the original application to the FCC (and what was awarded), Hamot Medical Center had planned to utilize an MPLS network. The price of this connectivity was appreciably less than what fiberoptic connectivity may be. It is also recognized that fiberoptic connectivity carries significantly more bandwidth and, as such, does not limit or interfere with the services that can be provided across these connections. Currently, the RFP has not been submitted for bids regarding the network. Past conversations and experience with fiber connections have allowed Hamot Medical Center representatives to prepare a rough cost estimate regarding this network. Presently, MPLS (T-1) connectivity is used to support the on-going telemedicine initiatives at Kane Community Hospital and Bradford Regional Medical Center. Kane Community Hospital offers outpatient clinical evaluation and Bradford Regional Medical Center uses the technology in its cardiac catheterization laboratory. In the current situation, a total of three evaluations can be performed

simultaneously; if, however, a catheterization is being transmitted, the entire bandwidth is necessary and no other functions can occur. Obviously there is a need to upgrade the system and add more bandwidth to allow more than one application to take place. Both entities will have additional services added to their facility and will further compound the problem. Couple that with the additional sites desired and there is a definite need to expand. With the MPLS network, the cost per month to both of these facilities is approximately $3100. Kane takes advantage of the Universal Services Funding to reduce the financial responsibility (last year was reimbursed $855 on a bill of $1613 per month); Bradford Regional Medical Center does not. To provide additional service and increased connectivity to each of the facilities outlined in the FCC project, it appears that $12,000/month would be required. With the Universal Services Pilot program grant received, 85% of this cost would be covered – reducing Hamot Medical Center's responsibility to approximately $21,600 per year for the length of the grant. After the Pilot project has ended, it is anticipated that the network will participate in the existing RHC support mechanism. Past experience with the existing program usually has resulted in the cost reimbursement of 55-60% of the lines.

Medicaid Transportation Savings

Rural patients will save both time and money by eliminating the need to travel in order to receive healthcare consults. Because telemedicine improves access to a broad range of specialists and provides standardization of care, a substantial amount of medical care and services can be offered in the rural communities. Having the local care and service will also help to reduce the governmental expense related to the Medical Assistance Transportation Program (MATP). MAPT funding is allocated for each county to provide transportation to patients who would not otherwise have it. According to the Governor's Executive Budget for the Fiscal Year 2008-2009, it is estimated that 9.091 million one-way non-emergent medical trips will occur and $56.248 million has been set aside to cover the costs of these trips. This estimate reflects an increase of $1.195 million from the previous year. In counties served by this telemedicine project, there are 11,649 individuals enrolled in Medicaid. Even if only 40% of those individuals would qualify for the MATP, they would account for 78,449 miles that must be reimbursed at $0.25/mile. There are no public transportation options for the citizens of these counties – no bus programs, no taxis, etc. Reducing the number and distance of these trips and providing care via telemedicine could result in considerable savings to the government.
Rural patients and healthcare insurance may potentially save countless dollars by allowing patients to participate in prevention and wellness clinics that are not currently available to them. These clinics would help them manage chronic ailments such as heart disease rather than waiting until more drastic (and expensive) treatment is required.

Prison Health Contract

An agreement with the State Correctional Institution (Prison Health Systems) has been completed and will allow telemedicine evaluations to begin between specialists at Hamot Medical Center and the various State Correctional Institutions across Pennsylvania. Indirect procedural revenue from these evaluations (cardiac catheterization / intervention, electrophysiological studies, cardiac surgery) will help to off-set the cost of the ISDN connectivity necessary to conduct the evaluations.

SUMMARY

Cost savings will be realized by the rural hospitals and communities:

- Travel for CME will be reduced or entirely eliminated, providing tremendous cost savings for our rural healthcare sites
- Network management and infrastructure will be provided by Hamot Medical Center, ensuring successful connectivity and participation by the end user sites, without additional expense on their part
- Rural patients will save both time and money by eliminating the need to travel in order to receive healthcare consults
- Rural patients will potentially save countless dollars by participating in prevention and wellness clinics, helping them to manage chronic ailments such as heart disease rather than waiting until more drastic (and expensive) treatment is required
- Clinical and back-office functions may be shared among Hamot Medical Center and the rural hospitals
- Local care can continue to be provided locally rather than sending patients out of town
- Partnership with a tertiary care center

Community benefits that may be realized:

- Telemedicine connectivity will allow access to specialists which they do not currently have
- Disease management programs
- Community educational programs

Rural providers will benefit by:

- The availability of continuing medical education (CME)
- Reduced isolation
- Recruitment and retention of rural healthcare workers

The Northwestern Pennsylvania Telemedicine Initiative will strengthen the connection between rural community hospitals and their satellite facilities and Hamot Medical Center. There has been a long-standing relationship for over a decade with each of these facilities and, in the face of the economic crisis, sharing related services and resources makes good business sense. The implementation of telecommunication lines will greatly enhance the ability to share these services and resources. Significant cost reductions for the rural community hospitals will be demonstrated that are very near to their entire bottom line for just one project occurring across these lines. Coupled with savings that may be realized from reduced travel for CME and the revenue generated from specialty clinic testing, the rural community hospitals will find the telemedicine initiative beneficial. Hamot Medical Center will enjoy a more solid relationship with the community hospitals and staff. The investment in cost of the telecommunications lines will be off-set with tertiary care referrals as a result of the telemedicine initiative. Both are strong reasons to continue to sustain the services after the FCC grant is complete.

10. Provide detail on how the supported network has advanced telemedicine benefits:

There are three main goals and objectives of this proposed network:

- ☐ To improve access to a broad range of nationally recognized medical specialty services and help provide standardization of care for patients. A significant amount of the medical care and services can be offered in the rural communities, saving patients time and money

- To use telemedicine to encourage physicians, nurse, and allied health professionals to establish practices and services and remain in the rural communities. Telemedicine can provide increased collaboration and support by peers and improve access to quality continuing education opportunities.
- Telemedicine may also alleviate the financial burden on rural community hospitals having to recruit specialists to their facility.
- Promote the cooperation of smaller community hospitals to share services
- Allows for the transmission of diagnostic studies
- Enables sharing of back-office functions, after hours pharmacy coverage, etc for the rural community hospitals

Lessons that we learned from a pilot project with Kane Community Hospital were the basis of the desire to continue to expand telemedicine applications. Kane, Pennsylvania is located 95 east of Erie in the heart of the Allegheny Forest. There are no easily accessible major highways and the geographic climate of the area makes travel difficult nearly 6 months out of the year. In addition, there is no public transportation available for patients to get back and forth to their appointments.

Cardiologists from Hamot Medical Center have been traveling for many years to provide a regional cardiology clinic at Kane. There was a need for additional cardiology time – a need that could not be met by sending a cardiologist any more frequently than was already being done. Telemedicine enabled patients to be seen on a daily or near-daily basis by the cardiologist. After the telemedicine evaluation it was decided whether the patient required more advanced testing or if he/she could stay in their hometown for treatment. Once the outpatient evaluations caught on, physicians at Kane began to utilize the telemedicine unit for certain inpatient consultations. Rather than keep the patient longer than they should or transfer the patient unnecessarily, these physicians were able to confer with the specialist to determine the best possible avenue for care.

In terms of distance learning and education, Grand Rounds and nursing Lunch and Learn programs were transmitted via telemedicine on a weekly basis. Physicians from the Kane Community Hospital system were able to participate and gain CME without the need to travel to acquire them.

A hybrid composed of an MPLS and fiberoptic network would enable interconnectivity with all the healthcare systems in the Northwestern Telemedicine Initiative. As such, the system can be accessed during a national crisis and provide information simultaneously throughout the network to each of the affiliated hospital systems. The fiberoptic ring would provide a redundant, comprehensive and complete optical fiber-based backbone for the regional and local hospitals to interconnect. The fiberoptic network would be capable of deploying all of the telemedicine applications as well as eliminating the bandwidth restrictions.

Explain how the supported network has allowed health care providers access to government research institutions, and/or academic, public, and private health care institutions that are repositories of medical expertise and information

Although the network is not yet been implemented, rural health care providers will have access to various specialists and medical libraries of Hamot Medical Center through the telemedicine connectivity. Hamot Medical Center has a College of Anesthesia with students deployed in several rural institutions. Telemedicine connectivity will allow them to participate in courses from their assigned facilities without the travel back to Erie.

…enhanced the health care community's ability to provide a rapid and coordinated response in the event of a national crisis.

The network will enable the health care system to receive current information in the event of a national crisis. As such, the health care system will become the central location for the dispatch of information to the emergency crews, firemen and police.

11. Provide detail on how the supported network has complied with HHS health IT initiatives:

Not applicable at this time as the network has not been constructed.

Explain how the supported network has used health IT systems and products that meet interoperability standards recognized by the HHS Secretary N/A

Explain how the supported network has used health IT products certified by the Certification Commission for Healthcare Information Technology N/A

Explain how the supported network has supported the Nationwide Health Information Network (NHIN) architecture by coordinating activities with organizations performing NHIN trial implementations. N/A

Explain how the supported network has used resources available at HHS's Agency for Healthcare Research and Quality (AHRQ) National Resource Center for Health Information Technology. Several articles regarding emerging lessons from the website have been instrumental in the design of the health care network.

Explain how the selected participant has educated themselves concerning the Pandemic and All Hazards Preparedness Act and coordinated with the HHS Assistant Secretary for Public Response as a resource for telehealth inventory and for the implementation of other preparedness and response initiatives The planning checklist from the website has been reviewed. Articles regarding the above have been evaluated.

Explain how the supported network has used resources available through HHS's Centers for Disease Control and Prevention (CDC) Public Health Information Network (PHIN) to facilitate interoperability with public health and emergency organizations. The Public Health Emergency Exercise Toolkit has been reviewed.

12. Explain how the selected participants coordinated in the use of their health care networks with the Department of Health and Human Services (HHS) and, in particular, with its Centers for Disease Control and Prevention (CDC) in instances of national, regional, or local public health emergencies (e.g., pandemics, bioterrorism). In such instances, where feasible, explain how selected participants provided access to their supported networks to HHS, including CDC, and other public health officials. N/A at this time.