MAINE STATE LEGISLATURE

The following document is provided by the

LAW AND LEGISLATIVE DIGITAL LIBRARY

at the Maine State Law and Legislative Reference Library
http://legislature.maine.gov/lawlib

Maine Public Utilities Commission

**Telecommunications Needs Assessment for
Federally Qualified Health Centers in Maine**

BERRY.DUNN.MCNEIL & PARKER

B D M P

January 31, 2007

Table of Contents   Page

Appendices
Appendix Overview
Appendix A – Glossary of Terms
Appendix B – FQHC Site Questionnaires
Appendix C – Maps of FQHCs in the State of Maine
Appendix D – Telecommunications Vendor Available Services

Executive Summary

Berry, Dunn, McNeil & Parker was engaged by the Maine Public Utilities Commission in November 2006 to conduct a two-phase project. The first phase assessed telecommunications needs among Federally Qualified Health Centers (FQHCs) in Maine. The second phase established an approach and work plan to seek funding from the federal Universal Service Fund – Rural Health Care program.

The assessment focused on the need for increased sharing of electronic information for practice management, medical records, and related functions that are essential to the delivery of health care. Our work was undertaken from an objective and independent perspective. In our assessment, we compiled information from FQHCs on their current information system and telecommunication usage. We also considered current infrastructure and services of their telecommunication providers.

We found that most of the FQHCs are meeting their communications needs; however, these needs are currently modest. As FQHCs move towards greater use of electronic practice management and medical record systems, their telecommunication needs and requirements will increase. An even greater driver of bandwidth capacity will be the increased use of telemedicine.

We also found that FQHC's, and other potentially eligible rural healthcare providers in Maine, are underutilizing the Rural Healthcare funding program. Of 2,230 funded applications for this program during 2005, only 19 came from the Maine.

Based on our assessment, we have identified the following recommendations with respect to telecommunications for FQHCs in Maine:

♦ Network infrastructure capability exists today to provide FQHCs with greater bandwidth connections.

♦ Telemedicine should be considered in addition to electronic practice management and medical records in planning for minimum bandwidth needs.

♦ The communications infrastructure should have the following minimum attributes to support these needs: dedicated bandwidth, symmetrical data transmission connection, a service level agreement, redundant telecommunication services, and minimum bandwidth of 1.544 mbps.

♦ Applications for Rural Health Care funding should be undertaken on a coordinated basis. This has the best likelihood of increasing funding coming into Maine rural healthcare providers.

♦ The FQHCs could also benefit from increased levels of collaboration and communication in managing their information technology. A user group(s) could be a beneficial mechanism to help achieve this.

This report, plus its appendices, describes our project, presents findings, and provides supporting materials. In this report we also distinguish how federal funding may be

sought under two programs – the FCC/Universal Service Fund Rural Health Care program and a new FCC Pilot Program. These programs are described, along with our recommendations to strengthen the application process and best increase the opportunity for funding.

The application process for the Universal Service Rural Health Care program, along with an approach and workplan to undertake the process, is described in our phase two deliverable provided under separate cover.

We want to thank everyone who participated in this project, including the individual FQHC representatives, the staff of the Maine Public Utilities Commission, the Public Advocate Office, and the Maine Primary Care Association, for their cooperation, courtesy and assistance extended to us during our work.

We would be pleased to address any questions about this report. Questions may be directed to cdavies@bdmp.com.

1.0   Introduction

This section of the report details the objectives set forth by the Maine Public Utilities Commission in RFP #906185 and the approach and methodology taken by our team to meets those objectives for phase one.

1.1 Project Objective

Berry, Dunn, McNeil & Parker (BDMP) was engaged by the Maine Public Utilities Commission (MPUC) to conduct a telecommunications needs assessment (phase one), and to develop an application assistance work plan to seek funding (phase two) from the federal Universal Service Fund (USF) - Rural Health Care program, for designated Federally Qualified Health Centers (FQHCs) in the State of Maine. The duration of our project extended from November 2006 to January 2007.

Phase one focused on assessing the current environment of the FQHCs and telecommunication capabilities to meet the needs of telemedicine, Electronic Medical Record (EMR), and Electronic Practice Management (EPM). The directed scope of our project specifically focused on the following aspects:

1. What transport technologies meet the integrity, speed, and security needs of EPM and EMR connectivity across health care settings? This profile would consider the requisite bandwidth for real-time utilization of decision support tools, lab and other data transfer, transfer of entire records, agency billing, and all other mission critical tasks reliant on data transfer.

2. Among FQHC sites, which need point-to-point connectivity, either internal to the organization or with external settings? Using what technologies?

3. What infrastructure currently exists at and to each site? At what cost? Are there efficiencies that can be gained by alternatives that meet the needs set forth above?

4. What are the telecommunications support needs for the different FQHCs?

These aspects of the study are addressed in this report.

1.2 Approach and Methodology

Our work on the project consisted of:

♦ Designing a telecommunication needs assessment questionnaire,
♦ Conducting a kick-off presentation with Maine Primary Care Association (MPCA) members on November 16 at their annual conference,
♦ Gathering information and reviewing questionnaire results,

- ♦ Making follow-up inquiries with the FQHCs per their response,

- ♦ Researching the needs of telemedicine, EMR, and EPM, Understanding the currently available telecommunications services throughout Maine by researching providers of various communication services, including traditional fixed line telephony, cable modem, and wireless, and

- ♦ Researching the Universal Service Fund funding information, including the Rural Health Care support as well as the Federal Communication Commission's (FCC) new Pilot Project. We participated in two Universal Service Administrative Company (USAC) conference calls, one call with the Vice President for Rural Health Care Program (USAC), one informational call with an FCC spokesperson for the Pilot Project, and we spoke with numerous project stakeholders.

Our role on this project was to conduct inquiries, compile, and assess the information provided to us. BDMP did not perform an audit or conduct substantive testing of information or systems in completing this assessment.

2.0 Understanding Requirements for Health Information Technology (HIT) Management and Relevant Programs

This section of the report provides baseline understanding of the clinical and administrative functions and information systems relevant to this project and their impact on telecommunication and bandwidth requirements. In addition, BDMP has included a description of the USAC Rural Health Care Program and other projects that are relevant to understanding the current telehealth environment for Maine's FQHCs.

2.1   Electronic Clinical Information

Electronic Medical Record (EMR), Electronic Health Record (EHR), and Electronic Patient Record (EPR) all have slightly different meanings and different people, vendors, and organizations may use them interchangeably. The main commonality between all of the terms is a shift from a traditional paper record of clinical information to an electronic version stored and used in a software environment. As organizations make the move to this electronic version, the requirements and minimum standards of the information technology environment that supports it increase.

Attributes of reliability, security, speed, and redundancy in the network become increasingly important as the legal medical document shifts to an electronic version. Images also become an increasingly important part of the electronic record. Disaster recovery planning and business continuity also become more critical when all patient information is contained in an electronic form and no longer backed up with a paper chart.

The current model of EMR adoption is first to establish it on a practice or facility level and then to an organizational level. Most states are now working on some form of a Regional Health Information Organization (RHIO); different approaches are being evaluated and no single model is predominant yet. Maine, under the auspices of Home Health InfoNet, contemplates a data sharing utility that can be accessed by health care centers. A specific design and pilot project is still to be determined. This movement towards increased sharing of patient information, however, is pushing the need for faster, safer, and more reliable telecommunication connectivity.

Impact on Connectivity Needs and Bandwidth

The greater the patient history that is contained in an electronic record, the larger the size that each patient's record will become. The record size will also increase as graphic files such as digital x-rays, MRIs, and photographs are attached to a patient record. Increases in file size increase the needed bandwidth to support the data sharing system.

The technical requirements of EMR software vendors identify bandwidth requirements based on the network deployment (e.g., Fat Client vs. Thin Client architecture) and the

number of concurrent users. As organizations move past the cultural and operational hurdles of the adoption of EMR, the number of concurrent users at each facility will inevitably increase.

Some general benchmarks to guide the estimation for needed bandwidth are:[1]

Minimum Bandwidth Benchmarks for EMR and EPM	
IT Architecture	**Bandwidth Per Concurrent User**
Thin Client	25 - 27 kilobyte per second
Fat Client	64 kilobyte per second
Fat Client with image scanning	128 kilobyte per second

Table 1: Bandwidth for EMR and EPM

The following tables depict minimum bandwidth estimates using the bandwidth benchmarks to support EMR and EPM for different IT architectures and numbers of concurrent users.

Thin Client Architecture		
Concurrent Users	**Minimum Bandwidth per User**	**Total Needed Bandwidth[2]**
4	27	108 kbps
8	27	216 kbps
12	27	324 kbps
16	27	432 kbps
20	27	540 kbps

Fat Client Architecture		
Concurrent Users	**Bandwidth per User**	**Total Needed Bandwidth**
4	64	256 kbps
8	64	512 kbps
12	64	768 kbps
16	64	1024 kbps
20	64	1280 kbps

Fat Client Architecture with image scanning		
Concurrent Users	**Bandwidth per User**	**Total Needed Bandwidth**
4	128	512 kbps
8	128	1024 kbps
12	128	1536 kbps
16	128	2048 kbps
20	128	2560 kbps

Table 2: Bandwidth for Concurrent Users and Architectures

---

[1] Bandwidth benchmarks provided by NextGen.
[2] Kbps = kilobits per second (1000 kilobits = 1megabit). For example, an ISDN line provides transport rates of 128kbps while a T-1 provides a transport rate 1.544 mbps.

Importance of Security and Reliability

In addition to the speed requirements to support EMR and EPM, both security and reliability must be considered. In an EMR environment, all confidential patient data is stored electronically, increasing the importance of technical safeguards to protect information which is transmitted. Different levels of risk are associated with different broadband technologies and the risk of each should be considered when selecting one to support clinical information transfer.

Reliability becomes a major concern when physicians depend on electronic medical data. If the patient information is not available because of a connection that has failed, it presents a major problem and potentially harmful situation. Accordingly, the quality and backups for data connections must be managed.

Importance of Telemedicine as well as EMR and EPM

In addition to EMR and EPM, telemedicine should also be considered when assessing the needs for bandwidth. Telemedicine refers to using video conferencing, image sharing, and access to patient information to perform diagnosis and treatment. In combination with EMR, telemedicine provides health facilities in rural areas the ability to provide a level of care that is equal to their urban counterparts.

Telemedicine has a much greater need for dedicated high speed bandwidth than EMR or EPM. The minimum bandwidth estimates found in the tables above address the needs of EMR and EPM but can fall short of the requirements for a telemedicine solution. The video attribute of telemedicine has an additional requirement that does not apply to EMR and EPM. An ISDN connection, either a BRI or PRI, is needed to support video conferencing.

Below are two quotations from the FCC's report on telemedicine.[3]

> "The convergence of healthcare technology and telecommunications technology offers an extraordinary opportunity to expand the availability and affordability of modern healthcare. Whether it is long-distance video-conferencing with specialists, the transmission of images or data, the availability of patient information or medical education materials on the Internet, telemedicine expands access to healthcare. Increased access is of particular importance in rural areas, and the Telecommunications Act recognizes the significant needs of rural areas for a telecommunications infrastructure capable of supporting basic services and the benefits this infrastructure will provide for healthcare.
>
> …continued…

---

[3] (http://www.fcc.gov/Reports/telemed3.txt)

The Advisory Committee recommends, and believes the Act requires, adequate telecommunications infrastructure to be made available to rural healthcare providers. The telecommunications infrastructure, whether it be wireline or wireless, must be sufficient to allow eligible healthcare practitioners requesting these services to access a basic set of telemedicine applications necessary for healthcare in rural areas. In the opinion of the Advisory Committee, the minimum bandwidth necessary to meet this requirement is 1.544 mbps or the equivalent. Rural healthcare providers can request telecommunications services up to 1.544 mbps, and the telecommunications carrier is obligated to provide service at the level requested as described in the Recommendations."

The following chart depicts a potential baseline requirement for bandwidth usage for each of the technologies we have examined plus another tier of image sharing, which we have referred to as "high-resolution graphics." We identify this higher tier to represent greater demands for bandwidth than the telemedicine recommendation set forth by the FCC. One example of the need for higher bandwidth is "store and forward" telehealth, where static digital images are sent to a clinician for the purpose of review, but not in realtime.
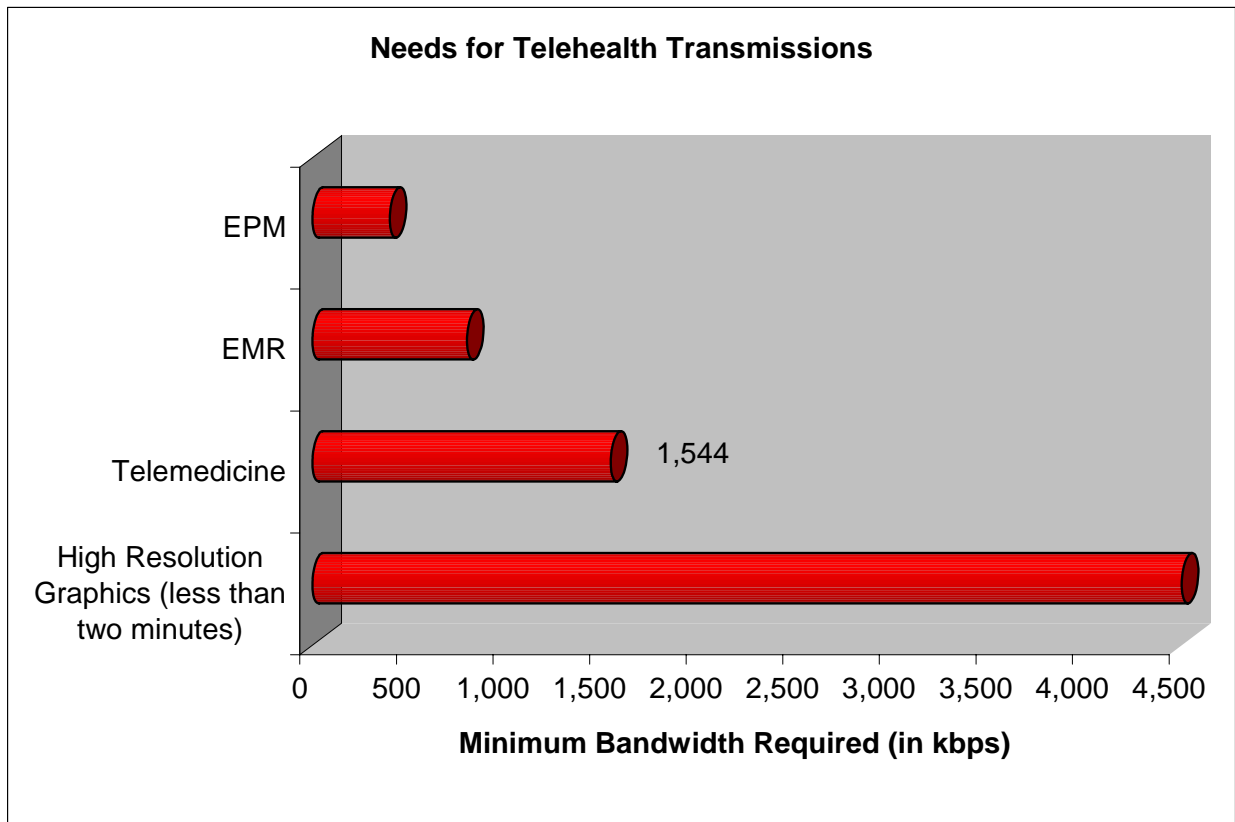

Chart 1: Bandwidth for Telehealth Applications

2.2 Health Information Technology (HIT) Funding and Projects

The following is a description of specific efforts relevant to the FQHCs in considering a technology infrastructure that will support integrated patient information and data sharing.

USAC Rural Health Care Program

The Rural Health Care (RHC) program of the Universal Service Fund (USF) makes discounts available to eligible rural health care providers for telecommunication services and monthly Internet service charges. The program was created as part of the 1996 Telecommunications Act and is intended to ensure that rural health care providers do not pay more for telecommunications in providing health care services than their urban counterparts.

The program is administered by the Universal Service Administrative Company (USAC) which serves as the administrator of the USF at the direction of the Federal Communications Commission (FCC) and requires each physical location of a health care practice to submit an annual application for assistance. Currently the program will reimburse 100% of the eligible urban/rural differential for voice services, and 25% of the eligible urban/rural differential for data services, including but not limited to Internet access. In addition, newer technologies such as Voice over Internet Protocol (VoIP) are not supported under the current RHC funding mechanism. The RHC program has consistently not fully allocated its funding resources and the program remains underutilized. The application process for this funding is the focus of our phase two work of this project.

FCC Rural Healthcare Pilot Project

In light of this under achievement of funding, the FCC has created a new pilot project for the rural healthcare program. It is specifically focused on assisting health care providers in creating regional broadband networks and possibly connecting to Internet2. The main reason for this development is to increase the use of telehealth and telemedicine services in rural areas.[4]

> "The perspective and intent of the pilot project is that telehealth applications, including telemedicine, allow patients to access critically needed medical specialists in a variety of practices, including cardiology, pediatrics, and radiology, without leaving their homes or communities. Use of these technologies can reduce hospital stays and the costs of medical care, as well as facilitate transmission of emergency medical records among doctors and health care facilities."

---

[4] (http://www.usac.org/_res/documents/rhc/pdf/FCC-Adopts-Pilot-RHC-Program-DOC-267605A1.pdf)

The pilot project will fund up to 85% of the cost to construct and operate state or regional broadband networks and for services provided over the network. The remaining 15% of costs must be provided by the applicant in cash (not in-kind services). The Pilot Project is not a traditional grant and should be seen by potential applicants as an open ended opportunity to develop a business plan approach to procuring funding from the FCC.

Internet2[5]

Internet2 is a not-for-profit advanced networking consortium comprising more than 200 U.S. universities in cooperation with 70 leading corporations, 45 government agencies, laboratories, and other institutions of higher learning as well as over 50 international partner organizations. The organization is governed by an executive Board of Trustees and strategic councils consisting of leaders who represent a broad membership. The attraction of Internet2 is it provides a limited access, national "backbone", high speed network that involves leading research entities across education, government, and business for the purpose of scientific collaboration and advancement. The only organization in the State of Maine that is currently part of Internet2 is the University of Maine at Orono.

CONNECT – Implementing EPM and EMR at FQHCs

The Maine Primary Care Association (MPCA) has undertaken a project, partially funded through a four-year grant from the U.S. Health and Resources and Services Administration (HRSA). The Collaborative Network for Northern New England's Integration of Information and Communication Technology (CONNECT). Its mission is to ensure access for the medically underserved, including the uninsured and underinsured through the development and application of shared critical decision support tools integrated with the collaborative model. CONNECT is tasked with developing, implementing and operating an integrated electronic health record system to support clinicians in providing quality patient care and administrative staff in operating efficient, viable facilities.

Under this program the NextGen practice management and EMR software has been implemented, or is in process of being implemented at the following six FQHCs:

- ♦ York County Community Health Center
- ♦ Sacopee Valley Health Center
- ♦ HealthReach Community Health Centers
- ♦ Sebasticook Family Doctors
- ♦ Regional Medical Center at Lubec
- ♦ Islands Community Medical Services

---

[5] www.internet2.edu

Maine Telehealth Working Group (GOHPF and MeHAF)

The working group was formed in April 2006 under the auspices of Governor Baldacci's State Health Plan and is co-sponsored by the Governor's Office of Health Care Policy and Finance (GOHPF) and the Maine Health Access Foundation (MeHAF). The primary intent of the group is to find better ways to utilize available technology to increase access to care and improve health care delivery. According to the working group, Maine has one of the most extensive telemedicine infrastructures in the United States. The goal of the workgroup is to identify and address current telehealth barriers, with a report due to the Governor by the end of calendar year 2007.

MeHAF previously conducted a study of barriers to telehealth access and found the following issues impacting increased utilization:

- ♦ Licensing – the State Licensing process may not be conducive to supporting telehealth efforts;
- ♦ Credentials and Privileging – the ability of telehealth to cross geographic boundaries and institutions may challenge the current process for assigning clinician credentials;
- ♦ Lack of familiarity with telehealth services and technologies – both consumers and clinicians, may not be accustomed to using telehealth applications; and
- ♦ Reimbursement of telehealth services – outside of Medicaid, most insurers are not willing to reimburse these types of services.

Maine Health InfoNet – Developing a Statewide Clinical Information System

In early 2006, HealthInfoNet was formed (with a grant from MeHAF) as a prospective regional health information organization with the goal to develop the statewide electronic clinical information sharing network. HealthInfoNet is governed by a Board of Directors made up of 19 physicians, health care executives, consumers, employers and government and public health officials.

This project is in the planning and development stages, with an intended goal to develop a first-stage implementation during 2007.

3.0 Current Environment

This section of the report presents information and summaries of our findings on the Maine FQHCs that were specifically included in phase one of this assessment. This section also contains information provided by relevant communications vendors that can provide telecommunication service to these FQHCs.

3.1 Overview of Federally Qualified Health Centers (FQHCs)

Background Description of the FQHC Program

FQHCs provide health services to underserved populations.[6] This includes all people who face barriers in accessing services because they have difficulty paying for services, because they have language or cultural differences, or because there is an insufficient number of health professionals or health resources available in their community. Underserved populations also include people who have disparities in their health status. Some health centers may focus on specific special populations such as homeless people, migratory and seasonal farmworkers, residents of public housing, or at-risk school children, while most serve a cross-section of the population in their communities.

In order to qualify as an FQHC, an organization must meet essential elements that distinguish it from other types of providers. FQHCs are required to:

♦ Be located in or serve a high need community (i.e., "medically underserved areas" or "medically underserved populations");

♦ Provide, either directly or through contracts or cooperative arrangements, a broad range of primary care services inclusive of medical, dental, mental health, and substance abuse services, as well as supportive services, such as case management, translation, and transportation services, that promote access to health care;

♦ Make services available to all residents of its service or "catchment" area, with fees adjusted based upon a individual's ability to pay; sliding fee scales must be offered for people with incomes up to 200% of the Federal Poverty Level;

♦ Operate under the direction of a governing board with a majority of directors who are users of the center and who represent the diversity of individuals being served by the center; and

♦ Meet other performance and accountability standards regarding its administrative, clinical, and financial operations. Health centers operated by a tribe or tribal organization pursuant to the Indian Self-Determination Act or

---

[6] Source: Comparison of the Rural Health Clinic and Federally Qualified Health Center Programs, Revised June 2006, issued by the U.S. Health Resources and Services Administration (HRSA) and the FINAL REPORT, February 2006 to the Maine Health Access Foundation, titled "Primary Care Safety Net Environmental Scan." For more information on the differences between RHCs and FQHCs please see Appendix E of this report.

urban Indian organizations that receive funding under Title V of the Indian Health Care Improvement Act are also designated as FQHCs.

3.2   FQHCs in the State of Maine

All of Maine's FQHCs were assessed in this project. There were thirteen participants in the needs assessment (phase one) and an additional nine also considered for the application assistance plan.

The following sites are part of both the telecommunications needs assessment and the USF application assistance plan – phase one:	
• Bucksport Regional Health Center	• Indian Township
• East Grand Health Center	• Pines Health Services
• Eastport Health Care	• Pleasant Point
• Harrington Family Health Center	• Regional Medical Center at Lubec
• Isleboro Health Center	• Sacopee Valley Health Center
• Islands Community Medical Services	• Sebasticook Family Doctors
• St. Croix Regional Family Health Center	

The following sites are only part of the USF application assistance plan – phase two:	
• Community Clinical Services	• Katahdin Valley Health Center
• DFD Russell Medical Center	• Penobscot Community Health Center
• Fish River Rural Health	• Health Care for Portland's Homeless
• Health Access Network	• York County Community Health Center
• HealthReach Community Health Centers	

For the purposes of this assessment we refer to all sites as health centers. This includes the 19 FQHCs identified on the Maine Primary Care Association's website, two tribal clinics (Indian Township and Pleasant Point), and one health center that defines itself as an RHC - Isleboro Health Center. For more information and a graphic representation of where sites are located in the State, please see Appendix C.

3.3 Phase One Assessment Sites

Our questionnaire and fact-finding assessment considered the following categories of information on each FQHC:

- Current Telecommunications Environment
- Computer and Software Systems
- Security

- Background Information
- Funding from Federal, State, or other sources for technology initiatives

Following is a narrative description of the 13 FQHCs and their technology and current telecommunications environment.

3.3.1   Bucksport Regional Health Center

The Bucksport Regional Health Center is a FQHC located in the county of Hancock. The center has two locations (one medical and one dental) in Bucksport and employs approximately 50 people. Bucksport has eight healthcare providers. The center has 50 computers, 5 servers, and utilizes firewalls to protect its data.

The current telecom provider is Verizon. Bucksport is currently spending approximately $2,500 a month for voice services (telephone, etc.) and $1,140 for data services (Internet connectivity, etc.). Bucksport has a fractional T-1 circuit (frame relay), which provides 768 kbps of bandwidth and they do have a Service Level Agreement (SLA) with Verizon. In addition, they use dial-up service for backup. The center does not use wireless services either internally or externally. Bucksport reported no problems with their current service level or the reliability of existing service. The center receives $642 per month from the USAC Rural Health Care Division Program to subsidize its frame relay expenses.

Bucksport does not currently utilize telemedicine or EMR services, but does use EPM. The medical services use MegaWest Practice Management software by Companion Technologies Inc. and the dental services uses Dentrix Practice Management software (integrated with Gendex digital x-ray imaging software). The center does have a disaster recovery plan in place and backs up all practice management systems daily. Bucksport does have internal staff to support its technology.

3.3.2   East Grand Health Center

East Grand Health Center is a FQHC located Danforth, Maine in Washington County. The center has one location and employs approximately eight people. The center has eight computers, one server, and utilizes a firewall to protect data.

The current telecom/communications providers are MCI, Metropolitan Communications, and Pioneer Wireless. East Grand is currently spending approximately $250 a month for voice services (telephone, etc.) and $150 for data services (Internet connectivity, etc.). East Grand uses a cable modem connection solely for its EPM management. East Grand does not have an SLA with any of its current providers. In addition, they use Pioneer Wireless for Internet access. The center does not use wireless services internally. East Grand reported no problems with their current service level or the reliability of existing services. They receive no state or federal funding for technology at this time.

East Grand does not currently utilize telemedicine or EMR services, but as stated above uses EPM. The center uses Companion Technology for EPM. East Grand has developed a disaster recovery plan. The center outsources most of its technology support to Companion and I-Tech Central.

3.3.3 Eastport Health Center

Eastport Health Care is a FQHC located in Washington County. The center supports a total of four locations with the primary location in Eastport, two in Machias and one in Calais. Eastport employs approximately 61 people. Eastport has 15 healthcare providers. The center supports 55 computers, four servers and eight wireless laptops that clinicians use at the Eastport facility and the center utilizes firewalls to protect its data.

The current telecom provider is Verizon. Eastport is currently spending approximately $1,150 a month for voice services and $275 for data services. Eastport Health Center uses DSL in three sites and has one ISDN line. Eastport does not have an SLA with its current provider. As stated, the primary site at Eastport utilizes wireless services to connect laptops with its network within building. The center does have a satellite telephone for emergency backup, which was provided via a Federal Emergency Management Authority (FEMA) grant, but receives no other state or federal funding at this time.

Eastport utilizes some telemedicine applications, and uses Polycom software via ISDN. In addition the center uses Companion Technology for its EMR and EPM system. Although the center reports no problems with its connectivity, it does report its biggest challenge is managing the wireless laptops, which are used in conjunction with the EMR software for mobile data access at the center. Eastport has developed a disaster recovery plan and has both internal IT support and uses external vendors to support EPM, EMR, and some networking.

3.3.4 Harrington Family Health Center

Harrington Family Health Center is a FQHC located in Washington County. The center has one location and employs approximately 35 people. The center has 21 computers, three servers, and utilizes a firewall to protect its data.

The current telecom/communications providers are Verizon and MCI. Harrington is currently spending approximately $1100 a month for voice services (telephone, etc.) and $150 for data services (Internet connectivity, etc.). Although the center states that DSL service is available nearby, it is not currently available to the center and they therefore use a satellite connection provided by Earthlink/MCI for their data access. Harrington reports that service is "fairly good" except during times of inclement weather. The center does not currently have an SLA. The center has received federal funding in the past, but did not provide details.

The Harrington Center is currently implementing EMR services and plans to use Companion Technology. In addition, the center is planning to begin using telemedicine in the near future and plans to install an ISDN line at that time. The center does not currently utilize EPM. The center retains an IT consultant to provide services and also relies on the Companion help desk to provide software maintenance and support. The center is also developing a disaster recovery plan.

3.3.5   Islesboro Health Center

Isleboro Health Center considers itself a RHC versus a FQHC. The center declined to participate in this assessment as of the completion of this draft, however, BDMP has continued to collect information where possible. The center is located in Waldo County.

3.3.6   Islands Community Medical Services

Islands Community Medical Services (ICMS) is a FQHC located in Vinalhaven, Maine in Knox County. The center has one location and employs approximately 14 people. The center has 10 computers and no servers currently. They utilize a firewall.

The current telecom provider is Verizon. ICMS is spending approximately $750 for voice services and $150 for data services per month. The center uses DSL for its Internet access and does not have an SLA. They do not have redundant/backup telecom services, but have an ISDN line. In addition, the center uses a wireless router in the facility to provide a mobile data connection for users.

ICMS is planning to implement EPM and EMR services using NextGen software in the spring of 2007. This will be part of the MPCA's CONNECT program in which they join five other FQHCs in this effort. The MPCA helped secure $35,000 from the Davis Family Foundation for ICMS to help offset the implementation costs of hardware acquisition. The center uses telemedicine services through the Maine Telemedicine services (see Lubec 3.3.11). The center does not currently utilize EPM. The center is working on finalizing its disaster recovery plan.

3.3.7   St. Croix Regional Family Health Center

St. Croix Regional Family Health Center is located in Princeton, Maine in Washington County. The center has two locations, the primary is in Princeton and the second location is in Calais. St. Croix employs approximately 14 people and has 7 healthcare providers. The center has five computers and one server. The center in Princeton has a firewall and the location in Calais does not have Internet access.

The current communications/telecom providers for the center are Direct Line Communications and Adelphia Cable. St. Croix spends approximately $600 per month on voice services (Direct Line) and $100 per month on data services (Adelphia/Time Warner). The center does not currently have an SLA nor do they have

redundant/backup telecom services. The center has not received any federal or state funding for technology services in the past 10 years.

St. Croix does not currently utilize telemedicine or EMR services, but uses EPM. The center uses Companion Technology for EPM. St. Croix has developed a disaster recovery plan. The center reported that it relies on internal support for most of its technology.

3.3.8 Indian Township Health Center

Indian Township Health Center is a Tribal Health Center, but considers itself an affiliate FQHC. The center did not return the questionnaire as of the completion of this draft. The center is located in Princeton, Maine in Washington County. Similar to the Point Pleasant Tribal Health Center (see 3.1.13) Indian Township is connected to the Indian Health Services (IHS) national data network. We are continuing to collect information where possible and we expect additional data.

3.3.9 Pines Health Services

Pines Health Services is currently an applicant to become an "FQHC-Lookalike." It is deemed an affiliate FQHC for the purposes of this assessment with sites in Caribou, Limestone, Presque Isle and Van Buren. All of these sites are in Aroostook County. Pines Health supports a total of five locations (two in Caribou) with the primary location in Caribou. Pines Health employs approximately 114 people. Pines Health has 31 healthcare providers. The center supports approximately 75 computers, six servers, and uses some wireless for internal communications. The center utilizes firewalls to protect its data.

Verizon is the telecom provider for Pines Health. The center is currently spending approximately $3,500 per month for voice services and $1,500 per month for data services. Pines Health uses wireless connectivity internally for mobile access to its Internet connection. The center is using voice over IP and all locations are on a common voice network. Pines Health has a T-1 at each clinic location and has an SLA with Verizon. However, the center noted that they have been unhappy with their current service, including voice, data, and long distance. In addition, this site sometimes needs additional bandwidth during peak usage.

Pines Health is not currently using EMR services. They utilize telemedicine for Psychiatry, Genetic counseling, and Pediatric Neurology, and have an ISDN line and also use IP for this service. The center is using EPM and the software is from CPSI. Pines Health has developed a disaster recovery plan.

3.3.10 Pleasant Point Health Center

Pleasant Point Health Center is a Tribal Health Center, located in Perry, Maine in Washington County. The center has one location and employs approximately 36

people. Pleasant Point currently has one full-time healthcare provider and seven that work a varying part-time schedule. The center has 32 computers and two servers, and they do have firewalls operational.

The telecom provider for this center is AT&T. The center currently spends approximately $600 per month for voice services and $0 for data services. Point Pleasant is connected to the Indian Health Services (IHS) national data network. The center currently has a fractional T-1 line over frame relay for data services and maintains an ISDN line as well. The center does not use wireless services either internally or externally. The center reports that it does not currently have an SLA with any vendor.

Pleasant Point reported that it is not currently using EPM or EMR services. However, as part of the IHS, they have access to the Resource and Practice Management System (RPMS) which is the enterprise-wide practice management system for IHS. They currently utilize telemedicine. The center has developed a disaster recovery plan.

3.3.11 Regional Medical Center at Lubec (RMCL)

RMCL is a FQHC located in Washington County. RMCL supports sites in Lubec, Machias, East Machias, and Calais. The center supports a total of five locations (two in Lubec) with the primary location in Lubec. The center employs approximately 150 people. The center supports approximately 150 computers, 16 servers, and uses wireless extensively for both internal and external communications. The center utilizes firewalls to protect its data.

RMCL's current telecom provider is Verizon. The center currently pays approximately $1,600 for voice services and $1,088 for data services. In addition, with the help of federal grant funding, Lubec has developed a microwave wireless point-to-point wide area network using unlicensed spectrum in the medical license band that connects all of its sites with T-1 and higher bandwidth capacity. The center then connects to Internet via a T-1 from Verizon. Lubec has an SLA with Verizon. The center also receives E-Rate funding from the federal government that totals approximately $300 per month to subsidize its data services.

The center is planning to implement EMR services using NextGen software in the spring of 2007. This also will be part of the MPCA's CONNECT program and they will join five other FQHCs in this effort (see Islands Community). The center also currently utilizes EPM and uses Companion technology for this service. Lubec has a disaster recovery plan completed and approved.

RMCL operates the Maine Telemedicine Services and continues to develop telemedicine, e-health, distance education, and interactive video-conferencing solutions for Maine health centers. It has developed approximately 100 telemedicine and distance education sites in the state and has won federal grants in excess of $1M in the past six years.

3.3.12 Sacopee Valley Health Center (SVHC)

Sacopee Valley is a FQHC located in Porter, Maine in Oxford County. The center has one location and employs approximately 42 people. The center supports approximately 30 computers and four servers. The center utilizes firewalls to protect its data.

The telecom/communications providers for Sacopee Valley are PineTree for voice and Adelphia/TimeWarner for data. The center currently spends approximately $1350 per month for voice services and $1250 per month for data services. Sacopee Valley does not have T-1 connectivity, but utilizes cable modem as its primary Internet access. Currently, the center does not have an SLA. Sacopee Valley has reported that it intends to implement wireless in 2007 for internal connectivity. In addition, the center reports that its current Internet connection is unreliable. SVHC received a $30,000 grant from the Davis foundation in 2006 to help offset the costs of EMR, but has not received any State or Federal funding for technology in the last 10 years.

Sacopee Valley is planning to implement EMR services using NextGen software in the spring of 2007. This also will be part of the MPCA's CONNECT program and they will join five other FQHCs in this effort (see Islands Community). The center also currently utilizes EPM and uses NextGen for this application as well. The center does not currently utilize telemedicine. SVHC does not have a disaster recovery plan completed.

3.3.13 Sebasticook Family Doctors

Sebasticook Family Doctors is located in Somerset and Penobscot Counties. The center supports a total of four locations. Sebasticook supports sites in Newport (primary), Dexter, Canaan, and Hartland (the location in Detroit no longer exists as listed in the original RFP). The center employs approximately 35 people. The center supports approximately 18 computers, five servers, and does use wireless for internal mobile connectivity. The center utilizes firewalls to protect its data.

The current telecom/communications providers for Sebasticook are Mid Maine Communications, TDS, and Verizon. The center spends approximately $2,500 per month for voice services and $1,000 per month for data services. Some sites are full T-1 (Newport and Canaan) while another is partial (Dexter) and Hartland is using DSL as its primary Internet access connectivity. The center does have an SLA. Sebasticook has not received any State or Federal funding for its technology initiatives.

Sebasticook is planning to implement EMR services using NextGen software in the spring of 2007. This also will be part of the MPCA's CONNECT program and they will join other FQHCs in this effort. The center also currently utilizes EPM and uses nTierprise, but will be switching to NextGen for this application as well, in conjunction with the EMR install. The center does not currently utilize telemedicine. Sebasticook does not have a disaster recovery plan completed, but has remote back up for its data.

Summary of Current FQHC Telecommunications Environment Findings

The following findings were developed by us based on our objective analysis of the FQHC information we gathered.

- ♦ Eleven of thirteen of the phase one FQHCs participated in our assessment.
- ♦ Sites are currently using dial-up, ISDN, DSL, cable modem, T-1, and microwave wireless technology to transport data to the Internet.
- ♦ Only three out of eleven FQHCs currently have a Service Level Agreement (SLA) with their communications vendor.
- ♦ The total spending per month for these FQHCs currently approximates $15,900 for voice services and $6,800 for data services. These services cover 27 physical locations and encompass 559 full- and part-time employees.
- ♦ An average cost ratio for the phase one FQHCs is $2.30 spent on voice services for every $1 spent on data services. This ratio varied, but in every case voice spending outdistanced data spending. By comparison, the phase two FQHCs have closer to a one-to-one ratio between voice and data spending.
- ♦ Seven of eleven sites are currently using some type of software application for electronic practice management.
- ♦ Only two of the FQHCs are currently using EMRs, but another four plan to install EMR in 2007.
- ♦ The Regional Medical Center at Lubec is using telemedicine to a significant extent. They have obtained substantial federal funding via multiple grants in support of their efforts.
- ♦ Most sites report they are satisfied with their current level of connectivity. This holds true even if they are utilizing any combination of electronic practice management, medical records, and telemedicine. We note this level of satisfaction may decrease if use of new applications is adopted further by the FQHCs and the telecommunication connectivity remains in its current status.

3.4   Current Telecommunications Infrastructure

As part of our assessment, we considered what communications technologies are currently accessible to FQHCs. In order to develop a baseline understanding of service offerings available to FQHC locations[7], we assembled information for a diverse range of services including DSL, T1, cable modem, and wireless. It was not feasible to collect information from all potential providers; however, we judged that the sampling of providers was sufficient for the scope of this report.

BDMP contacted and requested information from Mid-Maine Communications, which was recently purchased by Otelco, Inc.; Verizon Maine Communications; Time-Warner Cable, which recently acquired Adelphia Cable and its infrastructure in Maine; and Pioneer Wireless Networks, which provides fixed wireless broadband services in portions of Aroostock and Washington counties. These vendors represent the current communications providers for 10 of the 11 phase one respondents. Please refer to Appendix D – Available Services at FQHC locations.

BDMP asked the following questions of the telecommunication service providers with respect to each of the FQHC locations:

♦   What type of business class Internet access do you offer for this area?

♦   What type of access services do you offer for telephone in these areas?

♦   What type of data services do you offer? For example, point to point, private IP, frame relay, or other?

♦   What is your sample pricing for the services listed?

According to an August 2006 article by the Maine Center for Economic Policy, the State lags behind the whole U.S. in broadband penetration. However, based on FCC service quality data, Maine has some of the best service and reliability ratings in the country. Maine has the first statewide ATM (Asynchronous Transfer Mode) fiber optic based network. With ten ATM switch locations located throughout the state, Maine is one of the first states with a 100% digitally switched network. Digital networks can support advanced, higher bandwidth technologies at higher speeds. [8]

Although ATM is an established network architecture, there are some indications that Multi-Protocol Label Switching (MPLS) is already becoming the new standard for how companies transport their voice, data, and video. MPLS is used to ensure that all packets in a particular flow take the same route over a backbone. Deployed by many telecom and service providers, MPLS can deliver the quality of service (QoS) required to support realtime voice and video as well as service level agreements (SLAs) that

---

[7] The number of physical locations which we gathered information for was 24, phase one FQHCs only, and includes the primary site for St. Croix and Lubec only.
[8] http://www.maineco.org/Telecommunications.php

guarantee bandwidth. This makes the technology very attractive for telehealth, but at this time it is probably not feasible for FQHCs to believe this technology could be made available to them as it is just being adopted by large enterprise networks.

One final point to consider when examining the state's infrastructure is that significant capital investments have been made in upgrading physical plant by companies such as Verizon, TimeWarner and others that we inquired of. The telecommunications landscape continues to change as costs decrease rapidly, services expand, and the demand for high speed infrastructure accelerates unabated.

The following is a summary of services offered by the connectivity providers we sampled. Vendors are listed alphabetically.

Great Works Internet (GWI)
GWI is an internet service provider (ISP) within Maine and New Hampshire. Their headquarters is in Biddeford, Maine. They provide dial up and high speed broadband internet and data services to both the residential and business markets within the state. GWI can provide the following services listed below to the FQHC's:

> **Voice Services –** VoIP

> **Internet Services –** ADSL, SDSL, T1, PRI TDM

> **Data Services –** Frame Relay

Mid-Maine Communications
Mid-Maine Communications is a Competitive Local Exchange Carrier (CLEC) serving the state of Maine. They provide voice, internet and data service to both the residential and business markets within the state. Mid-Maine operates its own fiber network. Mid-Maine Communications was recently acquired by Otelco Inc, a telecommunication company based in Oneonta, Alabama. The majority of the FQHC locations in the needs assessment are not within the Mid-Maine network. However, Mid-Maine can provide the following services listed below to the FQHC's through extended services:

> **Voice Services –** Resale Dial Tone

> **Internet Services –**T1 Extended Loop Service (EEL), Symmetrical DSL (SDSL)

> **Data Services –** Frame Relay

Pioneer Wireless Network Inc.
Pioneer Wireless is an internet service provider (ISP) within Maine. Their headquarters is in Houlton, Maine. They provide cable and wireless internet and data services to both the residential and business markets within the state. Pioneer Wireless operates its own carrier-class microwave network within Northern Maine. Pioneer Wireless acquired MFX

Internet in August, 2006. MFX Internet was another ISP within Northern Maine. Pioneer Wireless can provide the following services listed below to the FQHC's:

Voice Services – None available

Internet Services – Wireless internet, cable internet

Data Services – Frame Relay, T1, & DS3 when in the Verizon footprint

Time Warner Cable
Time Warner Cable is a cable provider serving Maine and other states. They provide cable television, digital voice, and data services to both the residential and business markets within the state. Time Warner operates its own fiber optic network within the state. Time Warner acquired Adelphia Communications in 2006. Adelphia was another cable provider within Maine and other states. Time Warner Cable can provide the following services listed below to the FQHC's:

Voice Services – None

Internet Services – Cable Modem, Pro-Link Cable

Data Services – Fiber Optic (3 mbps by 3 mbps)

Verizon[9]
Verizon is the Regional Bell Operating Company (RBOC) serving the state of Maine. They provide voice, internet and data service to both the residential and business markets within the state. They currently have more than 117,000 miles of fiber optic cable throughout the state. The Verizon product offerings within the overall FQHC area are the following:

Voice Services – POTS Lines (Plain Old Telephone System), Business Lines, Flexpath T1, and ISDN PRI

Internet Services – Existing Frame Relay and ATM, DSL (where loop qualified), and Verizon Business Dedicated Internet

Data Services – Point to Point T1, Frame Relay (384 kbps, 512 kbps, DS1 – 1.544 mbps, and DS3 – 44.736 mbps), ATM (DS1 – 1.544 mbps, DS3 - 44.736 mbps, and OC3 – 155.52 mbps), and EPL (10 to 600 mbps)

---

[9] Please note that at the writing of this report Verizon had announced merger talks with FairPoint Communications for its operations in the states of Maine, Vermont, and New Hampshire.

Table 3: Telecommunication Infrastructure Analysis on the following page provides an analysis of selected existing vendor infrastructure available to the FQHC locations. Listed down the left side column are all of the locations for the FQHC's. The primary location is identified with a number (e.g., 1), the additional locations are identified with the number and letter (e.g., 1a). The vendors sampled are listed across the top.

For each FQHC location we reviewed the vendor's infrastructure and identified if the vendor could provide a connection that met our minimum criteria of symmetrical, dedicated connection, minimum bandwidth, and having an SLA. If the product met all those categories, it received a ✓, if it did not it received a ⊘.

Significant findings from this information include:

♦ Maine already has a significant fiber penetration in the state. However, last mile infrastructure that allows the FQHCs to take advantage of these assets may be incomplete.
♦ Every FQHC location could have access to dedicated high speed bandwidth connectivity.

#	FQHC	Town	GWI	Mid-Maine Com.	Pioneer Wireless Network	Time Warner Cable	Verizon
1	Bucksport Regional Health Center	Bucksport	⊘	✔	⊘	✔	✔
1a	Bucksport Regional Health Center	Bucksport	⊘	✔	⊘	✔	✔
2	East Grand Health Center	Danforth	⊘	✔	✔	⊘	✔
3	Eastport Health Center	Eastport	⊘	✔	⊘	⊘	✔
3a	Eastport Health Center	Machias	✔	✔	⊘	⊘	✔
3b	Eastport Health Center	Machias	✔	✔	⊘	⊘	✔
3c	Eastport Health Center	Calais	✔	✔	⊘	✔	✔
4	Harrington Family Health Center	Harrington	⊘	✔	⊘	⊘	✔
5	Islesboro Health Center	Islesboro	⊘	✔	✔	⊘	✔
6	Islands Community Medical Services	Vinalhaven	⊘	✔	✔	✔	✔
7	St. Croix Regional Family Health Center	Princeton	⊘	✔	⊘	✔	✔
8	Indian Township Health Center	Princeton	⊘	✔	⊘	✔	✔
9	Pines Health Services	Caribou	✔	✔	✔	✔	✔
9a	Pines Health Services	Van Buren	⊘	✔	✔	✔	✔
9b	Pines Health Services	Presque Isle	✔	✔	✔	✔	✔
9c	Pines Health Services	Caribou	✔	✔	✔	✔	✔
9d	Pines Health Services	Limestone	⊘	✔	✔	✔	✔
10	Pleasant Point	Perry	⊘	✔	✔	⊘	✔
11	Regional Medical Center at Lubec	Lubec	⊘	✔	✔	⊘	✔
12	Sacopee Valley Health Center	Porter	⊘	✔	⊘	✔	✔
13	Sebasticook Family Doctors	Newport	⊘	⊘	⊘	✔	✔
13a	Sebasticook Family Doctors	Canaan	✔	✔	⊘	✔	✔
13b	Sebasticook Family Doctors	Hartland	⊘	✔	⊘	✔	✔
13c	Sebasticook Family Doctors	Dexter	⊘	✔	⊘	✔	✔

Table 3: Telecommunications Infrastructure Analysis

4.0   Assessing Telecommunication Needs for the 13 FQHCs

This section of the report details our research on the different communication technologies in relation to the communication needs of Maine's FQHCs as they continue to adopt health information technologies.

Technologies for EPM, EMR, and Telemedicine

Our research and analysis described in Section 3 presents the bandwidth requirements for a typical EMR implementation. We also describe telecommunications standards for telemedicine developed by the Federal Communications Commission (FCC) of 1.544Mbps, or the equivalent of a full, dedicated T-1 service. Our analysis shows EMR data transfer functions do not require bandwidth that would exceed the data transmission speeds provided by most cable modem, DSL, and satellite services. When requirements are examined within the scope of telemedicine, however, the current telecom infrastructure for many of the 13 FQHCs included in the phase one analysis begins to fall short of the needed minimum bandwidth.

Level of Connectivity Required to meet the Health Information Technology Needs of FQHCs in Maine

Today there are a number of modes of transmission that can attain speeds that will support the basic requirements of EPM and EMR applications. However, when telemedicine functions are considered, the bandwidth needs increase. As FQHCs continue to utilize more health information technologies as part of daily operations, many transmission modes become less attractive.

For example, cable modem and DSL services both have the ability to provide download speeds that can exceed that of a T-1. However, the following attributes make DSL and cable modem technologies less attractive: asymmetrical download and upload of data, an inability to secure a Service Level Agreement (SLA) with the provider, and the lack of dedicated point-to-point connectivity. All of these factors have the potential to reduce the integrity and reliability of communications. Please note that some business class cable modem and DSL services exist in today's market, but these offerings are limited.

Wireless transmission services have expanded greatly in recent years and will continue to be important technologies for rural areas because they require less infrastructure build out. This makes the technology attractive for low population density areas. However, similar to DSL and cable modem, wireless has attributes that are not desirable for telehealth. Fixed broadband wireless often times can provide speeds far above what a T-1 can offer, but security concerns about the ability to intercept the signal, insufficient redundancy of services offered, and the reliability of the technology in inclement weather make it less attractive for telehealth than a traditional T-1.

Likewise, satellite technology has made great strides in recent years, but reliability can be compromised by inclement weather, transmission speeds are slower than most other broadband offerings, and installation costs can be expensive.

The Need for a Point-to-Point Connection

The need for a point-to-point (P2P) connection for the FQHC's arises when multiple locations are addressed. When one FQHC has multiple locations, it immediately pulls into question whether or not a P2P connection is required. Also, the idea of creating a network with all of the FQHC's presents a situation in which point to point must be addressed.

Multiple location organizations can handle the Wide Area Network (WAN) design with different technologies. The two most common solutions to use are a P2P, commonly called a leased line, or Frame Relay. MultiProtocol Label Switching (MPLS) has become a newer technology that also may be considered for multiple locations in the near future.

Point to point is a basic WAN solution; it is a private line from one location to another. It is commonly called a leased line because the connection is leased from the telecommunications provider and used only by the company who leased it. A major advantage it provides is that a leased line's security and privacy are very high, and no other traffic is being sent across the line other than the customer's information.

Another important attribute of P2P is that it has a fixed amount of guaranteed bandwidth. P2P connections are commonly delivered with a full T1, which has a bandwidth of 1.544 mbps, though different bandwidths can be used. This bandwidth will also be backed up with an SLA from the carrier providing service.

The two negative aspects of a P2P connection are cost and the potential for vulnerability. Point to point connections are expensive compared to other technologies. This is because the customer is paying the carrier for a dedicated private line. P2P networks are commonly designed in a hub and spoke network. This creates a situation that if the hub location were to be compromised it would disrupt all of the locations connected to it. This can be mitigated by increasing the number of P2P connections (expanding redundancy in the network) so that they form a mesh network configuration; however this will increase the cost of the network as well.

Point-to-point technology is a solution that will fit the criteria of integrity, speed and security needed to support EMR, EPM and telemedicine. There is some risk in the reliability and vulnerability if the P2P WAN network is designed as a hub and spoke, but again, this can be mitigated with additional connections to form a mesh WAN network.

Other Considerations When Assessing Need

Quality of Service (QoS) issues must also be considered in determining what might be the best transport technology for each FQHC. Issues to be addressed include

negotiating a strong SLA that ensures adequate levels of support, reliability, and security. All FQHCs should have an SLA (only 3 of the 11 respondents do currently) that addresses the following:

♦ Definition as to what services are being guaranteed, how they will be measured, the process for realizing agreed-upon remedies, and the amount of time the service provider has to correct problems.

♦ Reimbursement for the cost of the back-up services in the event of a circuit outage.

♦ Protection from repeated failures and the opportunity to augment/replace defective services with more reliable services from another vendor or use a different technology at no additional cost if necessary. Option to cancel contract for failure over a prolonged period of time without penalty.

Telecommunication Needs Analysis

The table on the following page is an analysis of the current telecommunication services of the 13 FQHCs included in phase one. This table is explained in the following paragraphs.

Listed down the left side column are all of the locations for the FQHCs. The primary location is identified with a number (e.g. 1) the additional locations are identified with the number and letter (e.g. 1a).

Four categories are depicted across the top, for which we rated each FQHC's current solution: Whether or not the connection is symmetrical (same download and upload speeds), dedicated (the bandwidth is only used by the customer), minimum bandwidth (is the current bandwidth at least 1.544 mbps) and SLA (is the current connection backed up with a service level agreement). If the answer to all of those questions was yes, then the current connection was sufficient to meet the identified needs.

We have developed this table using the responses from the five vendors (GWI, Mid Maine, Pioneer Wireless, TimeWarner, and Verizon) that responded to our request for information.

	FQHC	Town	Symmetrical	Dedicated	Minimum Bandwidth	SLA	Meets Minimum Requirements
1	Bucksport Regional Health Center	Bucksport	Yes	Yes	No	Yes	No
1a	Bucksport Regional Health Center	Bucksport	No	Yes	No	No	No
2	East Grand Health Center	Danforth	No	No	No	No	No
3	Eastport Health Center	Eastport	No	Yes	No	No	No
3a	Eastport Health Center	Machias	No	Yes	No	No	No
3b	Eastport Health Center	Machias	No	Yes	No	No	No
3c	Eastport Health Center	Calais	No	Yes	No	No	No
4	Harrington Family Health Center	Harrington	No	No	No	No	No
5	Islesboro Health Center	Islesboro	N/A	N/A	N/A	N/A	N/A
6	Islands Community Medical Services	Vinalhaven	No	Yes	No	No	No
7	St. Croix Regional Family Health Center	Princeton	No	No	No	No	No
8	Indian Township Health Center	Princeton	N/A	N/A	N/A	N/A	N/A
9	Pines Health Services	Caribou	Yes	Yes	Yes	Yes	Yes
9a	Pines Health Services	Van Buren	Yes	Yes	Yes	Yes	Yes
9b	Pines Health Services	Presque Isle	Yes	Yes	Yes	Yes	Yes
9c	Pines Health Services	Caribou	Yes	Yes	Yes	Yes	Yes
9d	Pines Health Services	Limestone	Yes	Yes	Yes	Yes	Yes
10	Pleasant Point	Perry	Yes	Yes	No	No	No
11	Regional Medical Center at Lubec	Lubec	Yes	Yes	Yes	Yes	Yes
12	Sacopee Valley Health Center	Porter	No	No	Yes	No	No
13	Sebasticook Family Doctors	Newport	Yes	Yes	Yes	Yes	Yes
13a	Sebasticook Family Doctors	Canaan	Yes	Yes	Yes	Yes	Yes
13b	Sebasticook Family Doctors	Hartland	No	Yes	No	No	No
13c	Sebasticook Family Doctors	Dexter	Yes	Yes	No	Yes	No

Table 4: Telecommunication Needs Analysis

5.0 Findings and Recommendations

During the course of our project, we compiled data provided to us by the FQHCs, conducted independent research, and identified current telecommunication infrastructure available to the FQHCs. Based on our analysis; we developed the following conclusions and recommendations.

5.1 Telemedicine bandwidth requirements should be considered the benchmark for FQHCs in planning for their telecommunication needs.

Our analysis identified that EMR and EPM alone are not the greatest drivers in the need for increased bandwidth. When considering EMR and EPM, it is primarily in situations where an FQHC has many concurrent users that significant additional dedicated bandwidth will be required. However, when telemedicine needs are considered in combination with EMR and EPM, bandwidth requirements rise substantially.

- Establishing telemedicine as the baseline for FQHC connectivity needs will enable sufficient communications infrastructure for telemedicine, EMR, and EPM.
- Currently, only 7 of 19 FQHCs (phase one and two respondents) are using telemedicine services. Fourteen out of 19 FQHC respondents are currently in live operation or plan to be going into live operation with an Electronic Medical Record system.
- The Regional Medical Center at Lubec has been a pioneer for the deployment of telemedicine (Maine Telemedicine Services) and the acquisition of federal funding for telemedicine services in the State of Maine.

5.2 Attributes for minimum telecommunication requirements.

We have established that telemedicine, EMR and EPM should all be considered for the determination of minimum telecommunication requirements. In order for effective use of those technologies we recommend the following attributes:

- Must have a data connection with dedicated bandwidth.
- Must develop quality of service parameters for communications services procured, including, a Service Level Agreement (SLA) from the telecommunications provider.
- The FQHCs should have redundant (backup) telecommunication services in place to ensure the reliability of "uptime" (for example, a common backup for a full T1 as the primary data connection is a DSL line for a secondary/backup data connection).
- Access must meet the minimum bandwidth of 1.544 mbps as outlined by the FCC to support telemedicine.

5.3 A coordinated application process will strengthen the ability to obtain funding for Maine FQHC's from the USF Rural Health Care Program.

The Rural Health Care funding program is underutilized in the State of Maine. For the 2005 funding year there were 2,230 applications from 45 states and U.S. territories resulting in over $40 million in funding commitments.[10] Only 19 applications came from the State of Maine. This produced $47,358 in funding. Our research and analysis revealed that States with higher participation and coordination in the application process received higher amounts of funding.

♦ Every Maine FQHC and other eligible healthcare provider should be encouraged to participate in the Rural Health Care Program. Although each eligible entity needs to have a contact person to participate in the application process, they do not need to complete the application themselves.

♦ States or applicant groups that have a coordinated application process have shown the best results. This requires dedicated personnel to coordinate and oversee the application submission.

♦ Applications should be submitted as early in the USF funding cycle as possible because they are reviewed on a first come first serve basis. As of this writing, the 2006 funding year continues to be open to applications.

5.4 The FCC pilot project application process will benefit from a consortium of members.

The FCC Rural Health Care Pilot Project has been announced and is now awaiting federal approval to begin accepting applications. Based on our study, we recommend a concerted effort to secure funding from the FCC Pilot Project. The pilot project has the potential to fund more of the costs for data communications that the RHC program described above.

The application process for the Rural Health Care Pilot Project should be approached as a consortium of FQHCs to take best advantage of collaboration and leverage knowledge in the application process. We note the following:

♦ The FCC has stated in the pilot program that it encourages cooperation between health centers in the application process and that it seeks responses that take a statewide and/or regional approach.

♦ This Federal program looks favorably on proposals that connect the primary rural health care providers, as well as other providers, who will benefit from the network.

---

[10] Half of this funding, represented by 230 applications, was committed to the state of Alaska. By comparison , Michigan, for example, had 62 applicants for FY2005 and received $739,422 in funds – source USAC
– source USAC

♦ The USF program will cover up to 85% percent of costs for most expenditures and infrastructure investments under its guidelines. This leaves a 15% gap that will have to be provided for in the application process. The State of Maine is developing programs, e.g., ConnectME that may be able to provide these matching funds.

5.5 FQHCs could benefit from increased collaboration and communication in managing their information technology.

During our assessment, we identified that FQHC technical support staff could benefit from improved information sharing between the FQHCs. We also acknowledge the potential of partnering to improve purchasing power when seeking new telecommunication services.

♦ Given the limited resources of these organizations, FQHCs will need to continue to leverage organizations like the MPCA and others to provide technical and administrative support.

♦ A user group for FQHC technical staff would be an appropriate vehicle to increase the communication and collaboration between the health centers.

♦ Technology tools are available, such as online video conferencing and collaboration software that will facilitate interactive user groups and increased information sharing.

Asymmetrical
For the purposes of broadband technologies, it means that the download speed and upload speed are not the same. The download speed is higher than the upload speed. A common configuration would be 1.544 mbps download speed and 256 kbps upload speed.

ASP
(Application Service Provider) An organization that hosts software applications on its own servers within its own facilities. Customers rent the use of the application and access it over the Internet or via a private line connection. Also called a "commercial service provider." The Web browser, acting as a universal client interface, has fueled this "on-demand software" market. See Web application and service bureau.

ATM
(Asynchronous Transfer Mode) A network technology for both local and wide area networks (LANs and WANs) that supports realtime voice and video as well as data. The topology uses switches that establish a logical circuit from end to end, which guarantees quality of service (QoS). However, unlike telephone switches that dedicate circuits end to end, unused bandwidth in ATM's logical circuits can be appropriated when needed. For example, idle bandwidth in a videoconference circuit can be used to transfer data.

ATM is widely used as a backbone technology in carrier networks and large enterprises, but never became popular as a local network (LAN) topology. ATM is highly scalable and supports transmission speeds of 1.5, 25, 100, 155, 622, 2488 and 9953 Mbps (see OC). ATM is also running as slow as 9.6 Kbps between ships at sea. An ATM switch can be added into the middle of a switch fabric to enhance total capacity, and the new switch is automatically updated using ATM's PNNI routing protocol.

Bandwidth
The transmission capacity of an electronic pathway such as a communications line, computer bus or computer channel. In a digital line, it is measured in bits per second or bytes per second (see Mb/sec). In an analog channel or in a digital channel that is wrapped in a carrier frequency, bandwidth is the difference between the highest and lowest frequencies and is measured in Hertz (kHz, MHz, GHz).

Berry, Dunn, McNeil & Parker (BDMP)
Berry, Dunn, McNeil & Parker is a management consulting and accounting firm headquartered in Portland, Maine. BDMP is one of the largest management consulting and certified public accounting firms in New England, serving clients regionally and nationally.

Cable modem
A modem used to connect a computer to a cable TV service that provides Internet access. Cable modems can dramatically increase the bandwidth between the user's computer and the Internet service provider. Download speeds have reached 6 Mbps and beyond, but the connection is asynchronous. In order to prevent users with lower-cost cable access from hosting high-traffic Web servers, the upload speed is considerably slower, from 10 to 20 times slower. Cable operators also routinely change IP addresses assigned to users to prevent Web hosting (see DDNS).

Channel
The physical connecting medium in a network, which could be twisted wire pairs, coaxial cable or optical fiber between clients, servers and other devices.

Co-Location
A building that is constructed or rebuilt for datacenters. Also known as a carrier hotel, co-location center or Internet datacenter, telecom hotels typically house hundreds and thousands of Web servers for Web hosting organizations, large enterprises and other service organizations.

CONNECT
The Maine Primary Care Association (MEPCA) has undertaken a project, partially funded through a four-year grant from the U.S. Health and Resources Services Administration, the Collaborative Network for Northern New England's Integration of Information and Communication Technology (CONNECT). Its mission is to ensure access for the medically underserved, including the uninsured and underinsured through the development and application of shared critical decision support tools integrated with the Collaborative Model. CONNECT is tasked with developing, implementing and operating an integrated electronic health record system to support clinicians in providing quality patient care and administrative staff in operating efficient, viable facilities.

Disaster Recovery Plan
A plan for duplicating computer operations after a catastrophe occurs, such as a fire or earthquake. It includes routine off-site backup as well as a procedure for activating vital information systems in a new location.

DSL
(Digital Subscriber Line) A technology that dramatically increases the digital capacity of ordinary telephone lines (the local loops) into the home or office. DSL speeds are based on the distance between the customer and Telco central office. There are two main categories. Asymmetric DSL (ADSL) is for Internet access, where fast downstream is required, but slow upstream is acceptable. Symmetric DSL (SDSL, HDSL, etc.) is designed for connections that require high speed in both directions.

EMR
(Electronic Medical Records) Computerized medical records that bring patient care into the digital age and save time, money and lives. The push to adopt comprehensive electronic documentation between doctors' offices and hospital settings intensified after the RAND corporation published a study in 2005. The research stated that America's healthcare industry is expected to save over $80 billion annually and improve the quality of care when EMR becomes reality.

EPM
(Enterprise Practice Management) Software used to run a health care facility. This software suite will commonly include accounts receivable, billing and scheduling software. It will usually contain functionality to process claims electronically via electronic data interchange (EDI), check insurance eligibility, and manage authorizations.

Fat Client
A user's computer that contains its own applications that are run in the machine. New programs are installed on the local hard disk. This is the typical way people use their computers.

FCC
The Federal Communications Commission (FCC) is an independent United States government agency, directly responsible to Congress. The FCC was established by the Communications Act of 1934 and is charged with regulating interstate and international communications by radio, television, wire, satellite and cable. The FCC's jurisdiction covers the 50 states, the District of Columbia, and U.S. possessions (http://www.fcc.gov/aboutus.html)

FCC Rural Healthcare Pilot Project
The pilot program is an enhanced funding initiative intended to help public and non-profit health care providers construct state- and region-wide broadband networks to provide telehealth and telemedicine services throughout the nation. The program will fund up to 85% of the costs of constructing those networks, as well as the costs of advanced telecommunications and information services that will ride over these networks. If selected, up to 85% of the cost of connecting to Internet2, a dedicated nationwide backbone, may also be funded by the pilot program. Connection to Internet 2 is not required, but may be requested by the applicants. (http://www.fcc.gov/cgb/rural/rhcp.html)

Fiber-optic
Refers to systems that use optical fibers. Fiber- optic communications networks have transformed the world. Barely starting in the late 1960s but gaining serious momentum in the 1980s, the phone companies began to replace their copper long distance trunks with fiber cable. Eventually, all transmission systems and networks are expected to become fiber based, even to the home. In time, the electronic circuits in computers may be partially or fully replaced with circuits of light, in which case fiber pathways would be used throughout the system.

Firewall
The primary method for keeping a computer secure from intruders. A firewall allows or blocks traffic into and out of a private network or the user's computer. Firewalls are widely used to give users secure access to the Internet as well as to separate a company's public Web server from its internal network. Firewalls are also used to keep internal network segments secure; for example, the accounting network might be vulnerable to snooping from within the enterprise.

In the organization, a firewall can be a stand-alone machine (see firewall appliance) or software in a router or server. It can be as simple as a single router that filters out unwanted packets, or it may comprise a combination of routers and servers each performing some type of firewall processing.

Federally Qualified Health Center (FQHC)
The term "Federally Qualified Health Center," or FQHC, refers to three different types of clinics: Health Centers (HCs) funded under Section 330 of the Public Health Service (PHS) Act, including Community Health Centers (CHCs), Migrant Health Centers (MHCs), Health Care for the Homeless Health Centers (HCHs), and Public Housing Primary Care Centers (PHPCs); FQHC "Look-Alikes," or FQHCLAs, that have been identified by HRSA and certified by CMS as meeting the definition of "Health Center" under Section 330 of the PHS Act, although they do not receive grant funding under Section 330; and Congress created the FQHC program to allow special Medicare and Medicaid payments for CHCs and MHCs thereby ensuring that grant dollars intended for the uninsured were available for that purpose. In order to extend the CHC/MHC concept, Congress also authorized the special Medicare and Medicaid payments for clinics that operate in compliance with the requirements of the FQHC program, but that do not receive grant funding under Section 330 of the PHS Act. These clinics are commonly known as "Look-Alikes". (The following is taken from: Comparison of the Rural Health Clinic and Federally Qualified Health Center Programs, Revised June 2006, issued by the U.S. Health Resources and Services Administration (HRSA))

Frame Relay
A high-speed packet switching protocol used in wide area networks (WANs). Providing a granular service of up to DS3 speed (45 Mbps), it has become popular for LAN to LAN connections across remote distances, and services are offered by most major carriers.

FTP
(File Transfer Protocol) A protocol used to transfer files over a TCP/IP network (Internet, UNIX, etc.). For example, after developing the HTML pages for a Web site on a local machine, they are typically uploaded to the Web server using FTP.

FTP includes functions to log onto the network, list directories and copy files. It can also convert between the ASCII and EBCDIC character codes. FTP operations can be performed by typing commands at a command prompt or via an FTP utility running under a graphical interface such as Windows. FTP transfers can also be initiated from within a Web browser by entering the URL preceded with ftp://.

Internet2
The second generation of the Internet, developed by a consortium of more than 200 universities, private companies and the U.S. government. It was not developed for commercial use or to replace the Internet, but is the reincarnation of it, intended primarily for research. Whereas the Internet was first designed to exchange text, Internet2 is designed for full-motion video and 3D animations. Originally named UCAID (University Corporation for Advanced Internet Development), Internet2 spawned the high-speed Abilene backbone. See Abilene, UCAID and vBNS.

ISDN
(Integrated Services Digital Network) An international standard for switched, digital dial-up telephone service for voice and data. Analog telephones and fax machines are used over ISDN lines, but their signals are converted into digital by the ISDN terminal adapter (see below). Although announced in the early 1980s, it took more than a decade before ISDN became widely available. It enjoyed a surge of growth in the early days of the Internet, because it provided the only higher-speed alternative to analog modems in many areas. Still working in many behind-the-scenes applications, ISDN is rarely used for Internet access.

Kbps
One thousand bits per second. Kbps is used as a rating of relatively slow transmission speed compared to the common Mbps or Gbps ratings.

Key System
An inhouse telephone system that is not centrally connected to a PBX. Also known as a "key system," each telephone has buttons for outside lines that can be dialed directly without having to "dial 9."

LAN
(Local Area Network) A communications network that serves users within a confined geographical area. The "clients" are the user's workstations typically running Windows, although Mac and Linux clients are also used. The "servers" hold programs and data that are shared by the clients. Servers come in a wide range of sizes from Intel-based servers to mainframes. Printers can also be connected to the network and shared

Last Mile
The connection between the customer and the telephone company, cable company or ISP. The last mile has traditionally used copper-based telephone wire or coaxial cable, but wireless technologies offer alternative options in some locations. Also called "first mile."

Maine HealthInfoNet
In early 2006, HealthInfoNet was formed as a prospective regional health information organization with the goal to develop the statewide electronic clinical information sharing network. HealthInfoNet

is governed by a Board of Directors made up of 19 physicians, health care executives, consumers, employers and government and public health officials.

Mbps
Mbps means megabits per second and is used for transmission speeds in a network or in internal circuits.

MeHAF
The Maine Health Access Foundation (MeHAF) is the state's largest private nonprofit health care foundation. The Foundation was legally incorporated in April 2000 following the sale of Blue Cross and Blue Shield of Maine to Anthem Insurance Companies.

MeHAF's mission is to promote affordable and timely access to comprehensive, quality health care, and improve the health of every Maine resident*.*

MEPCA or MPCA
Is the membership organization for the **primary care safety net** in Maine. These include the state's Federally Qualified Health Centers, Indian Health Centers, and allied providers of care for all Maine residents regardless of insurance coverage or the ability to pay. (www.mepca.org)

MPLS
Short for *M*ulti*p*rotocol *L*abel *S*witching, an IETF initiative that integrates Layer 2 information about network links (bandwidth, latency, utilization) into Layer 3 (IP) within a particular autonomous system--or ISP--in order to simplify and improve IP-packet exchange.

MPLS gives network operators a great deal of flexibility to divert and route traffic around link failures, congestion, and bottlenecks. (http://www.webopedia.com/TERM/M/MPLS.html)

MPUC
The Maine Legislature created the Public Utilities Commission in 1913 and the Commission began operation on December 1, 1914. The Commission has broad powers to regulate more than 645 electric, telephone, water, and gas utility companies. The Commission also responds to customer questions and complaints, grants utility operating authority regulates utility service standards and monitors utility operations for safety and reliability. (www.maine.gov/mpuc/)

Network
A system that transmits any combination of voice, video and/or data between users. The network includes the network operating system in the client and server machines, the cables connecting them and all supporting hardware in between, such as bridges, routers and switches. In wireless systems, antennas and towers are also part of the network.

P2P
Point to Point refers to a communications line that provides a path from one location to another (point A to point B). A private communications channel leased from a common carrier. Commonly called a leased line or private line.

PBX
(Private Branch eXchange) An inhouse telephone switching system that interconnects telephone extensions to each other as well as to the outside telephone network (PSTN). A PBX enables a single-line telephone set to gain access to one of a group of pooled (shared) trunks by dialing an 8 or 9 prefix. PBXs also include functions such as least cost routing for outside calls, call forwarding,

conference calling and call accounting. Modern PBXs use all-digital methods for switching, but may support both analog and digital telephones and telephone lines.

PRI

(Primary Rate Interface) An ISDN service that provides 23 64 Kbps B (Bearer) channels and one 64 Kbps D (Data) channel (23B+D), which is equivalent to the 24 channels of a T1 line. The advantage of the D channel is that it sends control signals that can dynamically allocate any number of B channels for different applications. For example, one channel can be used for voice, while another can be used for data, while six more can be used for a videoconferencing channel and so on. PRI lines typically use four wire pairs. PRI lines are often designated as PRI/T1 or T1/PRI lines, but they are dial-up PRI lines, not T1 lines, which are point-to-point.

QoS

(Quality Of Service) A defined level of performance in a data communications system. For example, to ensure that realtime voice and video are delivered without annoying blips, a guarantee of bandwidth is required. The plain old telephone system (POTS) has delivered the highest quality of service for years, because there is a dedicated channel between parties.

However, when data is broken into packets that travel through the same routers in the LAN or WAN with all other data, QoS mechanisms are one way to guarantee quality by giving realtime data priority over non-realtime data (see packet switching). The only other way is to overbuild the network so there is always sufficient bandwidth.

Redundancy

Having a secondary peripheral, computer system or network device that takes over when the primary unit fails.

Remote access

The ability to log on to a computer or network within an organization from an external location. Remote access is typically accomplished by directly dialing up analog or ISDN modems or via a connection to the Internet.

Router

A network device that forwards packets from one network to another. Based on internal routing tables, routers read each incoming packet and decide how to forward it. The destination address in the packets determines which interface on the router outgoing packets are directed to. In large-scale enterprise routers, the current traffic load, congestion, line costs and other factors determine which outgoing line to forward to.

Satellite Broadband

Just as satellites orbiting the earth provide necessary links for telephone and television service, they can also provide links for broadband. Satellite broadband is another form of wireless broadband, also useful for serving remote or sparsely populated areas.

Downstream and upstream speeds for satellite broadband depend on several factors, including the provider and service package purchased, the consumer's line of sight to the orbiting satellite, and the weather. Typically a consumer can expect to receive (download) at a speed of about 500 Kbps and send (upload) at a speed of about 80 Kbps. These speeds may be slower than DSL and cable modem, but download speed is about 10 times faster than download speed with dial-up Internet access. Service can be disrupted in extreme weather conditions. (http://www.fcc.gov/cgb/broadband.html)

Server
A computer system in a network that is shared by multiple users. Servers come in all sizes from x86-based PCs to IBM mainframes. A server may have a keyboard, monitor and mouse directly attached, or one keyboard, monitor and mouse may connect to any number of servers via a switch. In large companies, servers often reside in racks in the datacenter, and all access is via their network connections.

SLA
(Service Level Agreement) A contract between the provider and the user who specifies the level of service that is expected during its term. SLAs are used by vendors and customers as well as internally by IT shops and their end users. They can specify bandwidth availability, response times for routine and ad hoc queries, response time for problem resolution (network down, machine failure, etc.) as well as attitudes and consideration of the technical staff.

Store and Forward (S&F)
S&F is a type of telehealth encounter or consult that uses still digital images of a patient for the purpose of rendering a medical opinion or diagnosis. Common types of S&F services include radiology, pathology, dermatology and wound care. Store and forward also includes the asynchronous transmission of clinical data, such as blood glucose levels and electrocardiogram (ECG) measurements, from one site (e.g., patient's home) to another site (e.g, home health agency, hospital, clinic).

Switch
A mechanical or electronic device that directs the flow of electrical or optical signals from one side to the other. Switches with more than two ports, such as a LAN switch or PBX, are able to route traffic.

Switched Ethernet
An Ethernet network that is controlled by a switch instead of a shared hub. The switch cross connects all clients, servers and network devices, giving each sending-receiving pair the full rated transmission speed. Half-duplex speed between nodes is 10 Mbps for Ethernet (10BaseT) and 100 Mbps for Fast Ethernet (100BaseT). Full-duplex is 20 and 200 Mbps. For more connections, a switch port can be wired to another switch or hub.

Symmetrical
For the purposes of broadband technologies, it means that the download speed and upload speed are the same.

T1
A 1.544 Mbps point-to-point dedicated, digital circuit provided by the telephone companies. The monthly cost is typically based on distance. T1 lines are widely used for private networks as well as interconnections between an organization's PBX or LAN and the Telco. The first T1 line was tariffed by AT&T in January 1983. However, starting in the early 1960s, T1 was deployed in intercity trunks by AT&T to improve signal quality and make more efficient use of the network.

TCP/IP
(Transmission Control Protocol/Internet Protocol) A communications protocol developed under contract from the U.S. Department of Defense to internetwork dissimilar systems. Invented by Vinton Cerf and Bob Kahn, this de facto UNIX standard is the protocol of the Internet and the global standard for communications.

Telecommuting
Working at home and communicating with the office by phone, fax and computer. In the U.S., at the beginning of the 21st century, more than 30 million Americans were telecommuting at least one day a week. Also called "teleworking."

Telehealth
Telehealth and telemedicine are sometimes used interchangeably, however, telehealth is generally considered to be a broader and provider neutral term that encompasses various applications where technology and medicine are being utilized to provider better patient care.

Telemedicine
("long distance" medicine) Using a videoconferencing link to a large medical center in order that rural health care facilities can perform diagnosis and treatment. A specialist can monitor the patient remotely taking cues from the general practitioner or nurse who is actually examining the patient.

Thin Client
A user's computer that performs no application processing. It functions like an input/output terminal, processing only keyboard and mouse input and screen output, and all application processing is done in the server. This is a "thin processing" client and is accomplished using Windows Terminal Server, Citrix Presentation Server and X Window.

Third Party
A separate individual or organization other than the two principals involved. It typically refers to an alternate source. For example, a third party is often a company that provides an auxiliary product not supplied by the primary manufacturer to the end user (the two principals). Countless third-party add-on and plug-in products keep the computer industry advancing at a rapid pace. It is the third-party vendor that is often the most inventive and innovative.

USAC
The Universal Service Administrative Company (USAC) is an independent, not-for-profit corporation designated as the administrator of the federal Universal Service Fund by the Federal Communications Commission (FCC). USAC administers Universal Service Fund (USF) programs for high cost companies serving rural areas, low-income consumers, rural health care providers, and schools and libraries. The Universal Service Fund helps provide communities across the country with affordable telecommunications services.
http://www.usac.org/about/usac/

USF (Universal Service Fund)
The goals of the Universal Service, as mandated by the Telecommunications Act of 1996, are:
- To promote the availability of quality services at just, reasonable, and affordable rates
- To increase access to advanced telecommunications services throughout the Nation
- To advance the ability of such services to all consumers, including those in low income, rural, insular, and high cost areas at rates that are reasonably comparable to those charged in urban areas

The Universal Service Fund (USF) was created by the Federal Communications Commission in 1997 to meet these goals. In addition, the 1996 Act states that all providers of telecommunications services should contribute to federal universal service in some equitable and nondiscriminatory manner; there should be specific, predictable, and sufficient Federal and State mechanisms to preserve and advance universal service; all schools, classrooms, health care providers, and libraries should, generally, have access to advanced telecommunications services; and finally, that the Federal-State Joint Board and the FCC should determine those other principles that, consistent

with the 1996 Act, are necessary to protect the public interest. (http://www.usac.org/about/universal-service/purpose-of-fund/)

Video Conferencing
A realtime video session between two or more users or between two or more locations. Although the first videoconferencing was done with traditional analog TV and satellites, inhouse room systems became popular in the early 1980s after Compression Labs pioneered digitized video systems that were highly compressed. While videoconferencing may comprise any number of end points communicating, the term "video chat" typically means between two end points only.

VoIP
(Voice Over IP) A telephone service that uses the Internet as a global telephone network. Many companies, including Vonage, 8x8 and AT&T (CallVantage), typically offer calling within the country for a fixed fee and a low per-minute charge for international. Broadband Internet access (cable or DSL) is required, and regular house phones plug into an analog telephone adapter (ATA) provided by the company or purchased from a third party.

VPN
(Virtual Private Network) A private network that is configured within a public network (a carrier's network or the Internet) in order to take advantage of the economies of scale and management facilities of large networks. VPNs are widely used by enterprises to create wide area networks (WANs) that span large geographic areas, to provide site-to-site connections to branch offices and to allow mobile users to dial up their company LANs.

WAN
(Wide Area Network) A long-distance communications network that covers a wide geographic area, such as a state or country. The telephone companies and cellular carriers deploy WANs to service large regional areas or the entire nation. Large enterprises have their own private WANs to link remote offices, or they use the Internet for connectivity. Of course, the Internet is the world's largest WAN.

WebEx
An application sharing and conferencing service that is widely used for presentations, demos, training and support from WebEx Communications, Inc., San Jose, CA (www.webex.com). Everything that the presenters see and manipulate on their computers can be viewed by everyone in the conference.

WebEx uses either an ActiveX control or Java applet in the computer at each end of the conference, and installation for new attendees is automatic. Meetings can be set up instantly or scheduled, and voice is handled by voice over IP (VoIP) or traditional PSTN conference calling.

Summary of Responses - phase one FQHCs only												
Name of FQHC	**Current Provider(s)**	**Current Data Service(s)**	**Have an SLA?**	**Voice Cost / mo.**	**Data Cost / mo.**	**Using EMR?**	**If yes, EMR Vendor**	**Using EPM?**	**If yes, EPM Vendor**	**Using Tele-medicine?**	**Locations Managed**	**Number of Employees**
1 - Bucksport	Verizon	Fractional T-1 (frame relay) and DSL	yes	$2,500	$1,140	no		yes	Companion and Dentrix	no	2	50
2 - East Grand Health	Metropolitan, MCI, and Pioneeer Wireless	Cable Modem and Broadband Wireless (not WiFi)	no	$250	$150	no		yes	Companion	no	1	8
3 - Eastport Health Care	Verizon	DSL	no	$1,150	$275	installing now	Companion	yes	Companion	yes	4	61
4 - Harrington Family Health	Verizon, MCI	Satellite	no	$1,100	$150	yes	Companion	no		installing now	1	35
5 - Isleboro Health Center	dnr	dnr	dnr	dnr	dnr	dnr	dnr		dnr	dnr	dnr	dnr
6 - Islands Community	Verizon	DSL	no	$750	$150	installing now	NextGen	no		yes	1	14
7 - St. Croix	Direct Line Comm., Adelphia	Cable Modem	no	$600	$100	no		no		no	2	14
8 - Indian Township	dnr	dnr	dnr	dnr	dnr	dnr		yes	Companion	dnr	dnr	dnr
9 - Pines Health Services	Verizon	T-1	yes	$3,500	$1,500	no		yes	CPSI	yes	5	114
10 - Pleasant Point	AT&T	Fractional T-1 (frame relay)	no	$600	$0	no		no		yes	1	36
11 - Regional Med Center Lubec	Verizon	T-1 and Microwave wireless point to point	yes	$1,600	$1,088	installing now	NextGen	yes	Companion	yes	5	150
12 - Sacopee Valley Health Center	PineTree, Adelphia	Cable Modem	no	$1,350	$1,250	installing now	NextGen	yes	NextGen	no	1	42
13 - Sebasticook Family Doctors	Mid Maine, TDS, and Verizon	T-1 and DSL	no	$2,500	$1,000	installing now	NextGen	yes	nTierprise, but switching to NextGen	no	4	35
Totals			**3 out of 11**	**$15,900**	**$6,803**	**1 out of 11**		**8 out of 11**		**5 out of 11**	**27**	**559**

dnr = did not respond

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
1. Current Telecom Environment - BUCKSPORT					
Please answer the following questions to describe your current telecom services					
1-1	Who is/are your current telecom service provider(s)? (e.g. Verizon, AT&T, Pinetree, etc.)				**Verizon and Verizon Online**
1-2	Do you have a T-1(s)?				**768 kb/sec Frame Relay Line serving BRHC at 110 Broaway (Medical Building) in Bucksport**
1-3	Do you have DSL service?				**Dental Office on Main Street, Bucksport, has DSL**
1-4	Do you have cable modem service?		No		
1-5	Do you use other technologies (wireless, satellite, etc.)? If yes, please explain in detail.		No		
1-6	How many voice lines/channels do you have?				**Unknown**
1-7	What is your current bandwidth? (e.g. 128kb, 768kb, 1.54mb, etc)				**768 kb**
1-8	Do you have a Service Level Agreement (SLA), guaranteed bandwidth, with your current vendor?	Yes			
1-9	Do you currently have redundant telecom services? (e.g. a primary and secondary internet connection, a T1 and backup telephone lines)	Yes			**Secondary Internet dial-up service through Midmaine.com**
1-10	How reliable is your service?				**Never a problem**
1-11	What is your current telephony premise equipment? (e.g. a Private Branch Exchange (PBX), Voice Over Internet Protocol (VoIP), Key System, etc)				**Centrex System serviced by Verizon**
1-12	If you have a PBX, is it digital or analog?				**N/A**
Please answer the following questions to describe the technologies and					
1-13	Do you host an FTP - file transfer protocol, server/site?		No		
1-14	Do you host a website (or sites)?		No		
1-15	Do you host an email server?				**Email service hosted "offsite" by XO Communications, Inc.**
1-16	Do you use videoconferencing? If yes, what technology(ies) do you use?		No		

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
1-17	Do you currently use telemedicine services? If yes, what technology(ies) do you use?		No		
1-18	Does a third party vendor provide these services, or do you support in house?				N/A
1-19	If the health center currently utilizes wireless technology, how is wireless technology being used across the health center?		No		N/A
1-20	Do you provide remote access to your employees?		No		
	Please answer the questions below to describe your telecom service expenses				
1-21	What is your monthly and/or annual expense for voice services?				**$2,500.00 Average/Month**
1-22	What is your monthly and/or annual expense for data services?				**$1,140.00 Average/Month**
1-23	Other expenses? Please describe in detail.				**Please let us know if you need other defined expense categories.**
2. Computer & Software Systems					
	Please answer the questions below to describe your current clinical and practice management software environment				
2-1	Do you currently use software hosted by an Application Service Provider (ASP)?		No		
2-2	Does the health center utilize document management/imaging systems?				Medical Record Archives are currently being converted to a document imaging system by American Medical Systems of Maine, Inc
2-3	Are you currently using EMR (electronic medical record) software? If so, who is your current vendor?		No		
2-4	Are you currently using EPM (enterprise practice management) software? If so, who is your current vendor?	Yes			Medical Services uses MegaWest Practice Management software by Companion Technologies Inc; Dental Services uses Dentrix Practice Management software (integrated with Gendex digital x-ray imaging software).
2-5	What information are you sharing over the internet (e.g. lab results, digital images, etc)				Medical dictation sent over Internet for transcription and returned as Word files.
2-6	What problems do you have managing electronic data? (e.g. files that are too large to handle, unreliable internet connection, etc)				No problems experienced to date.
3. Security					
3-1	Do you utilize data encryption when sharing files? If so, explain how and what type of encryption do you use?				Medical Dictation Vendor (Deventure Inc) has data encryption built into proprietary software
3-2	Do you have a firewall(s)?	Yes			Cisco PIX Firewall at Frame Relay hub modem and XP firewalls on all PCs
3-3	Do you have a VPN - Virtual Private Network?		No		

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
4-1	How many locations do you manage?			2	
4-2	How many employees are at each health center location?			42 - Medical Bldg 8 Dental Bldg	
4-3	Do you have both internal and external support staff? If, yes please describe who supports your technology?				Internal support by various Health Center staff.
4-4	How many workstation computers do you currently utilize?			50	
4-5	How many servers?			4 - medical 1 - dental	
4-6	Describe how your workstations connect to your internal network? (e.g. wireless, wired jacks, etc)				wired Ethernet jacks
4-7	Do you have diagrams of your current internal network(s)? External network(s)? **Please include a copy of any diagrams that you have when you return this questionnaire**.				Not yet
4-8	What type of switches and routers do you use?				Netopia Router (DCHP IP address assignment) at frame relay hub modem and 3Com switches
4-9	Does the health center have official policies outlining acceptable Internet usage and bandwidth utilization for all employees?	Yes			
4-10	Does the health center have an updated IT emergency preparedness plan or Disaster Recovery Plan?		No		
4-11	Does the health center have a strategic technology plan that is currently being followed?				
4-12	Have you ever participated in a telecom assessment or filled out a similar questionnaire before?		No		
5. External Funding since 1996					
5-1	Have you ever received federal funding for telecom services or infrastructure? If yes, how much and when?				$642.00 per Month from USAC Rural Health Care Division Program to subsidize frame relay expenses shown in question #1-22 above.
5-2	Have you ever received state funding for telecom services or infrastructure? If yes, how much and when?		No		
5-3	Have you ever received other types of funding for telecom services or infrastructure? If yes, how much and when?		No		

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
1. Current Telecom Environment - East Grand Health					
Please answer the following questions to describe your current telecom services					
1-1	Who is/are your current telecom service provider(s)? (e.g. Verizon, AT&T, Pinetree, etc.)				**Metropolitian Telecommunications is for medical software server. MCI is for the regular telephone service. Pioneer Wireless is our internet server.**
1-2	Do you have a T-1(s)?		X		
1-3	Do you have DSL service?		X		
1-4	Do you have cable modem service?	X			**Only for medical software service.**
1-5	Do you use other technologies (wireless, satellite, etc.)? If yes, please explain in detail.	X			**For internet service only.**
1-6	How many voice lines/channels do you have?			0	
1-7	What is your current bandwidth? (e.g. 128kb, 768kb, 1.54mb, etc)				**N/A**
1-8	Do you have a Service Level Agreement (SLA), guaranteed bandwidth, with your current vendor?		X		
1-9	Do you currently have redundant telecom services? (e.g. a primary and secondary internet connection, a T1 and backup telephone lines)		X		
1-10	How reliable is your service?				**Appears to be o.k.**
1-11	What is your current telephony premise equipment? (e.g. a Private Branch Exchange (PBX), Voice Over Internet Protocol (VoIP), Key System, etc)				**None**
1-12	If you have a PBX, is it digital or analog?				**N/A**
Please answer the following questions to describe the technologies and					
1-13	Do you host an FTP - file transfer protocol, server/site?		X		
1-14	Do you host a website (or sites)?		X		
1-15	Do you host an email server?		X		
1-16	Do you use videoconferencing? If yes, what technology(ies) do you use?		X		

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
1-17	Do you currently use telemedicine services? If yes, what technology(ies) do you use?		X		
1-18	Does a third party vendor provide these services, or do you support in house?		X		
1-19	If the health center currently utilizes wireless technology, how is wireless technology being used across the health center?				Internet and e-mail
1-20	Do you provide remote access to your employees?		X		
	Please answer the questions below to describe your telecom service expenses				
1-21	What is your monthly and/or annual expense for voice services?				**Monthly average $200-$250 This is paid to MCI.**
1-22	What is your monthly and/or annual expense for data services?				**Monthly average $100- $125. This is paid to Metropolitian Communications.**
1-23	Other expenses? Please describe in detail.				**Internet access $45 monthly. This is paid to Pioneer Wireless.**
2. Computer & Software Systems					
	Please answer the questions below to describe your current clinical and practice management software environment				
2-1	Do you currently use software hosted by an Application Service Provider (ASP)?		X		
2-2	Does the health center utilize document management/imaging systems?		X		
2-3	Are you currently using EMR (electronic medical record) software? If so, who is your current vendor?		X		
2-4	Are you currently using EPM (enterprise practice management) software? If so, who is your current vendor?	X			Companion Technology
2-5	What information are you sharing over the internet (e.g. lab results, digital images, etc)			0	
2-6	What problems do you have managing electronic data? (e.g. files that are too large to handle, unreliable internet connection, etc)				None
3. Security					
3-1	Do you utilize data encryption when sharing files? If so, explain how and what type of encryption do you use?				N/A
3-2	Do you have a firewall(s)?	X			
3-3	Do you have a VPN - Virtual Private Network?		X		

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
4. Background Information					
4-1	How many locations do you manage?			1	
4-2	How many employees are at each health center location?			8	
4-3	Do you have both internal and external support staff? If, yes please describe who supports your technology?				**Companion Technology and i-Tech Central**
4-4	How many workstation computers do you currently utilize?			8	
4-5	How many servers?			1	
4-6	Describe how your workstations connect to your internal network? (e.g. wireless, wired jacks, etc)				**wired jacks**
4-7	Do you have diagrams of your current internal network(s)? External network(s)? **Please include a copy of any diagrams that you have when you return this questionnaire**.				**None**
4-8	What type of switches and routers do you use?				**N/A**
4-9	Does the health center have official policies outlining acceptable Internet usage and bandwidth utilization for all employees?		X		
4-10	Does the health center have an updated IT emergency preparedness plan or Disaster Recovery Plan?	X			
4-11	Does the health center have a strategic technology plan that is currently being followed?		X		
4-12	Have you ever participated in a telecom assessment or filled out a similar questionnaire before?		X		
5. External Funding since 1996					
5-1	Have you ever received federal funding for telecom services or infrastructure? If yes, how much and when?		X		
5-2	Have you ever received state funding for telecom services or infrastructure? If yes, how much and when?		X		
5-3	Have you ever received other types of funding for telecom services or infrastructure? If yes, how much and when?		X		

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
1. Current Telecom Environment - Eastport Health					
	Please answer the following questions to describe your current telecom services				
1-1	Who is/are your current telecom service provider(s)? (e.g. Verizon, AT&T, Pinetree, etc.)				**Verizon**
1-2	Do you have a T-1(s)?		X		
1-3	Do you have DSL service?	X			
1-4	Do you have cable modem service?		X		
1-5	Do you use other technologies (wireless, satellite, etc.)? If yes, please explain in detail.	X			**Satellite telephone for EMERGENCY**
1-6	How many voice lines/channels do you have?				**9 voice, 2 fax, 4 dedicated for computers, 3 DSL, 1 ISDN. (2 of the DSL lines share fax in satellite locations.**
1-7	What is your current bandwidth? (e.g. 128kb, 768kb, 1.54mb, etc)				**1.54mb**
1-8	Do you have a Service Level Agreement (SLA), guaranteed bandwidth, with your current vendor?		X		
1-9	Do you currently have redundant telecom services? (e.g. a primary and secondary internet connection, a T1 and backup telephone lines)		X		
1-10	How reliable is your service?				**Very**
1-11	What is your current telephony premise equipment? (e.g. a Private Branch Exchange (PBX), Voice Over Internet Protocol (VoIP), Key System, etc)				**PBX**
1-12	If you have a PBX, is it digital or analog?				**Digital**
	Please answer the following questions to describe the technologies and				
1-13	Do you host an FTP - file transfer protocol, server/site?	X			
1-14	Do you host a website (or sites)?	X			
1-15	Do you host an email server?	X			
1-16	Do you use videoconferencing? If yes, what technology(ies) do you use?	X			**Polycom telemedicine (ISDN)**
1-17	Do you currently use telemedicine services? If yes, what technology(ies) do you use?	X			**As above**

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
1-18	Does a third party vendor provide these services, or do you support in house?				**In house**
1-19	If the health center currently utilizes wireless technology, how is wireless technology being used across the health center?	X			Wireless network for EMR (Doctors use tablets) - biggest hassle for Eastport
1-20	Do you provide remote access to your employees?	**X**			
	Please answer the questions below to describe your telecom service expenses				
1-21	What is your monthly and/or annual expense for voice services?				**$1150.00/month**
1-22	What is your monthly and/or annual expense for data services?				**$275.00/month**
1-23	Other expenses? Please describe in detail.				
2. Computer & Software Systems					
	Please answer the questions below to describe your current clinical and practice management software environment				
2-1	Do you currently use software hosted by an Application Service Provider (ASP)?		X		
2-2	Does the health center utilize document management/imaging systems?	X			
2-3	Are you currently using EMR (electronic medical record) software? If so, who is your current vendor?	X			Companion Technologies
2-4	Are you currently using EPM (enterprise practice management) software? If so, who is your current vendor?		X		
2-5	What information are you sharing over the internet (e.g. lab results, digital images, etc)	X			Medical records (remote VPN) Physician access only
2-6	What problems do you have managing electronic data? (e.g. files that are too large to handle, unreliable internet connection, etc)				Have only been using EMR for 2 months. No problems yet.
3. Security					
3-1	Do you utilize data encryption when sharing files? If so, explain how and what type of encryption do you use?				No in house encryption
3-2	Do you have a firewall(s)?	X			
3-3	Do you have a VPN - Virtual Private Network?	X			

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
4. Background Information					
4-1	How many locations do you manage?	3			**Machias 3 North Street 12 East Main, Machias 55 Franklin Calais new medical practice (private physicians at 3 North)**
4-2	How many employees are at each health center location?				**48, 3, 5, 5**
4-3	Do you have both internal and external support staff? If, yes please describe who supports your technology?	X			**In house IT, Local outside network specialist, Companion Technologies for EMR and PMS systems.**
4-4	How many workstation computers do you currently utilize?				**55**
4-5	How many servers?				**4**
4-6	Describe how your workstations connect to your internal network? (e.g. wireless, wired jacks, etc)				**8 wireless laptops and tablets, all others wired**
4-7	Do you have diagrams of your current internal network(s)? External network(s)? **Please include a copy of any diagrams that you have when you return this questionnaire**.		X		
4-8	What type of switches and routers do you use?				**3-COM wired and wireless, Linksys2024, SonicWall**
4-9	Does the health center have official policies outlining acceptable Internet usage and bandwidth utilization for all employees?	X			
4-10	Does the health center have an updated IT emergency preparedness plan or Disaster Recovery Plan?	X			
4-11	Does the health center have a strategic technology plan that is currently being followed?		X		
4-12	Have you ever participated in a telecom assessment or filled out a similar questionnaire before?		X		
5. External Funding since 1996					
5-1	Have you ever received federal funding for telecom services or infrastructure? If yes, how much and when?	X			**Satellite Telephone and shortwave radio were provided through FEMA program. Do not know dollar value.**
5-2	Have you ever received state funding for telecom services or infrastructure? If yes, how much and when?		X		
5-3	Have you ever received other types of funding for telecom services or infrastructure? If yes, how much and when?		X		

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
1. Current Telecom Environment - Harrington					
	Please answer the following questions to describe your current telecom services				
1-1	Who is/are your current telecom service provider(s)? (e.g. Verizon, AT&T, Pinetree, etc.)				**Verizon, MCI**
1-2	Do you have a T-1(s)?		X		
1-3	Do you have DSL service?		X		**DSL runs on the line in front of our building but we cannot tie into it per verizon**
1-4	Do you have cable modem service?		X		
1-5	Do you use other technologies (wireless, satellite, etc.)? If yes, please explain in detail.	X			**We use ground control for our satellite internet**
1-6	How many voice lines/channels do you have?			7	
1-7	What is your current bandwidth? (e.g. 128kb, 768kb, 1.54mb, etc)				
1-8	Do you have a Service Level Agreement (SLA), guaranteed bandwidth, with your current vendor?		X		
1-9	Do you currently have redundant telecom services? (e.g. a primary and secondary internet connection, a T1 and backup telephone lines)		X		
1-10	How reliable is your service?				**Fairly good-unavailble during bad weather**
1-11	What is your current telephony premise equipment? (e.g. a Private Branch Exchange (PBX), Voice Over Internet Protocol (VoIP), Key System, etc)				**Nortel digital through a private vendor**
1-12	If you have a PBX, is it digital or analog?				
	Please answer the following questions to describe the technologies and				
1-13	Do you host an FTP - file transfer protocol, server/site?		X		
1-14	Do you host a website (or sites)?		X		
1-15	Do you host an email server?		X		
1-16	Do you use videoconferencing? If yes, what technology(ies) do you use?		X		

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
1-17	Do you currently use telemedicine services? If yes, what technology(ies) do you use?				**Not currently but will be installing an ISDN line to use our termed equipment**
1-18	Does a third party vendor provide these services, or do you support in house?				**Third party**
1-19	If the health center currently utilizes wireless technology, how is wireless technology being used across the health center?				Will be using wireless for our EMR in the near future
1-20	Do you provide remote access to your employees?		X		
	Please answer the questions below to describe your telecom service expenses				
1-21	What is your monthly and/or annual expense for voice services?				**Approx $1100/MO**
1-22	What is your monthly and/or annual expense for data services?				**$99/MO for satellite**
1-23	Other expenses? Please describe in detail.				**$45/MO email and $120/MO cell phones**
2. Computer & Software Systems					
	Please answer the questions below to describe your current clinical and practice management software environment				
2-1	Do you currently use software hosted by an Application Service Provider (ASP)?		X		
2-2	Does the health center utilize document management/imaging systems?				Near future with EMR
2-3	Are you currently using EMR (electronic medical record) software? If so, who is your current vendor?				Companion Technologies
2-4	Are you currently using EPM (enterprise practice management) software? If so, who is your current vendor?		X		
2-5	What information are you sharing over the internet (e.g. lab results, digital images, etc)				None
2-6	What problems do you have managing electronic data? (e.g. files that are too large to handle, unreliable internet connection, etc)				None yet
3. Security					
3-1	Do you utilize data encryption when sharing files? If so, explain how and what type of encryption do you use?		X		
3-2	Do you have a firewall(s)?	Y			
3-3	Do you have a VPN - Virtual Private Network?		X		

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
4. Background Information					
4-1	How many locations do you manage?			1	
4-2	How many employees are at each health center location?			35	
4-3	Do you have both internal and external support staff? If, yes please describe who supports your technology?	X			**IT Consultant, companion support desk**
4-4	How many workstation computers do you currently utilize?			21	
4-5	How many servers?			2	**Soon to be 3, possible 4**
4-6	Describe how your workstations connect to your internal network? (e.g. wireless, wired jacks, etc)			21	
4-7	Do you have diagrams of your current internal network(s)? External network(s)? **Please include a copy of any diagrams that you have when you return this questionnaire**.		X		
4-8	What type of switches and routers do you use?				**Watchguard firebox SOH06**
4-9	Does the health center have official policies outlining acceptable Internet usage and bandwidth utilization for all employees?		X		
4-10	Does the health center have an updated IT emergency preparedness plan or Disaster Recovery Plan?	X			
4-11	Does the health center have a strategic technology plan that is currently being followed?		X		
4-12	Have you ever participated in a telecom assessment or filled out a similar questionnaire before?		X		
5. External Funding since 1996					
5-1	Have you ever received federal funding for telecom services or infrastructure? If yes, how much and when?	X			
5-2	Have you ever received state funding for telecom services or infrastructure? If yes, how much and when?				
5-3	Have you ever received other types of funding for telecom services or infrastructure? If yes, how much and when?				

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
1. Current Telecom Environment - Islands Community					
Please answer the following questions to describe your current telecom services					
1-1	Who is/are your current telecom service provider(s)? (e.g. Verizon, AT&T, Pinetree, etc.)				**Verizon for DSL & ISDN**
1-2	Do you have a T-1(s)?		x		
1-3	Do you have DSL service?	x			
1-4	Do you have cable modem service?		x		
1-5	Do you use other technologies (wireless, satellite, etc.)? If yes, please explain in detail.	x			**wireless**
1-6	How many voice lines/channels do you have?				**16**
1-7	What is your current bandwidth? (e.g. 128kb, 768kb, 1.54mb, etc)				**no idea**
1-8	Do you have a Service Level Agreement (SLA), guaranteed bandwidth, with your current vendor?				
1-9	Do you currently have redundant telecom services? (e.g. a primary and secondary internet connection, a T1 and backup telephone lines)		x		
1-10	How reliable is your service?				**fairly reliable**
1-11	What is your current telephony premise equipment? (e.g. a Private Branch Exchange (PBX), Voice Over Internet Protocol (VoIP), Key System, etc)				**no idea**
1-12	If you have a PBX, is it digital or analog?				
Please answer the following questions to describe the technologies and					
1-13	Do you host an FTP - file transfer protocol, server/site?		x		
1-14	Do you host a website (or sites)?		x		
1-15	Do you host an email server?				**we use verizon for e-mail**
1-16	Do you use videoconferencing? If yes, what technology(ies) do you use?		X		

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
1-17	Do you currently use telemedicine services? If yes, what technology(ies) do you use?	X			**polycom unit for telemedicine**
1-18	Does a third party vendor provide these services, or do you support in house?				**third party - Maine Telemedicine services**
1-19	If the health center currently utilizes wireless technology, how is wireless technology being used across the health center?	x			we have a wireless router in house and a repeater
1-20	Do you provide remote access to your employees?		X		
	Please answer the questions below to describe your telecom service expenses				
1-21	What is your monthly and/or annual expense for voice services?				**$6000.00 per year for telephone service $840 for ISDN line**
1-22	What is your monthly and/or annual expense for data services?				**$800.00 for verizon DSL**
1-23	Other expenses? Please describe in detail.				**pager, answering service, satellite phone, cell phone - all together approx. $3000 per year**
2. Computer & Software Systems					
	Please answer the questions below to describe your current clinical and practice management software environment				
2-1	Do you currently use software hosted by an Application Service Provider (ASP)?		X		
2-2	Does the health center utilize document management/imaging systems?		X		
2-3	Are you currently using EMR (electronic medical record) software? If so, who is your current vendor?		X		
2-4	Are you currently using EPM (enterprise practice management) software? If so, who is your current vendor?		X		
2-5	What information are you sharing over the internet (e.g. lab results, digital images, etc)		X		
2-6	What problems do you have managing electronic data? (e.g. files that are too large to handle, unreliable internet connection, etc)			X	
3. Security					
3-1	Do you utilize data encryption when sharing files? If so, explain how and what type of encryption do you use?				
3-2	Do you have a firewall(s)?	X			
3-3	Do you have a VPN - Virtual Private Network?		X		

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
4. Background Information					
4-1	How many locations do you manage?				one
4-2	How many employees are at each health center location?				14
4-3	Do you have both internal and external support staff? If, yes please describe who supports your technology?				a local computer guru helps us with computer problems.
4-4	How many workstation computers do you currently utilize?				7 desktops, three laptops
4-5	How many servers?				none
4-6	Describe how your workstations connect to your internal network? (e.g. wireless, wired jacks, etc)				both wireless and wired
4-7	Do you have diagrams of your current internal network(s)? External network(s)? **Please include a copy of any diagrams that you have when you return this questionnaire**.		X		
4-8	What type of switches and routers do you use?				
4-9	Does the health center have official policies outlining acceptable Internet usage and bandwidth utilization for all employees?		X		
	Does the health center have an updated IT emergency preparedness plan or Disaster Recovery Plan?				working on it
4-11	Does the health center have a strategic technology plan that is currently being followed?		X		
4-12	Have you ever participated in a telecom assessment or filled out a similar questionnaire before?		X		
5. External Funding since 1996					
5-1	Have you ever received federal funding for telecom services or infrastructure? If yes, how much and when?	X			new access point capital funds in 2006-7, $35,000 for EPM/EMR. We are in the CONNECT network with MPCA. Start up in May 2007.
5-2	Have you ever received state funding for telecom services or infrastructure? If yes, how much and when?		X		
5-3	Have you ever received other types of funding for telecom services or infrastructure? If yes, how much and when?		X		

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
1. Current Telecom Environment - St. Croix					
	Please answer the following questions to describe your current telecom services				
1-1	Who is/are your current telecom service provider(s)? (e.g. Verizon, AT&T, Pinetree, etc.)				**Direct Line Communications**
1-2	Do you have a T-1(s)?		X		
1-3	Do you have DSL service?		X		
1-4	Do you have cable modem service?	X			**Adelphia Cable**
1-5	Do you use other technologies (wireless, satellite, etc.)? If yes, please explain in detail.		X		
1-6	How many voice lines/channels do you have?				**1**
1-7	What is your current bandwidth? (e.g. 128kb, 768kb, 1.54mb, etc)				**768**
1-8	Do you have a Service Level Agreement (SLA), guaranteed bandwidth, with your current vendor?		X		
1-9	Do you currently have redundant telecom services? (e.g. a primary and secondary internet connection, a T1 and backup telephone lines)		X		
1-10	How reliable is your service?				**Reliable unless the power is out**
1-11	What is your current telephony premise equipment? (e.g. a Private Branch Exchange (PBX), Voice Over Internet Protocol (VoIP), Key System, etc)				**PBX**
1-12	If you have a PBX, is it digital or analog?				**Analog**
	Please answer the following questions to describe the technologies and				
1-13	Do you host an FTP - file transfer protocol, server/site?		X		
1-14	Do you host a website (or sites)?		X		
1-15	Do you host an email server?		X		
1-16	Do you use videoconferencing? If yes, what technology(ies) do you use?		X		
1-17	Do you currently use telemedicine services? If yes, what technology(ies) do you use?		X		
1-18	Does a third party vendor provide these services, or do you support in house?				
1-19	If the health center currently utilizes wireless technology, how is wireless technology being used across the health center?				
1-20	Do you provide remote access to your employees?		X		
	Please answer the questions below to describe your telecom service expenses				
1-21	What is your monthly and/or annual expense for voice services?				**$600/month**
1-22	What is your monthly and/or annual expense for data services?				**$100/month**
1-23	Other expenses? Please describe in detail.				
2. Computer & Software Systems					
	Please answer the questions below to describe your current clinical and practice management software environment				

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
2-1	Do you currently use software hosted by an Application Service Provider (ASP)?		X		
2-2	Does the health center utilize document management/imaging systems?		X		
2-3	Are you currently using EMR (electronic medical record) software? If so, who is your current vendor?		X		not at this time, looking at others in the field
2-4	Are you currently using EPM (enterprise practice management) software? If so, who is your current vendor?	X			Companion Technologies
2-5	What information are you sharing over the internet (e.g. lab results, digital images, etc)				None
2-6	What problems do you have managing electronic data? (e.g. files that are too large to handle, unreliable internet connection, etc)				None
3. Security					
3-1	Do you utilize data encryption when sharing files? If so, explain how and what type of encryption do you use?				
3-2	Do you have a firewall(s)?	X			
3-3	Do you have a VPN - Virtual Private Network?		X		
4. Background Information					
4-1	How many locations do you manage?				2
4-2	How many employees are at each health center location?				10 Site 1; 4 Site Calais (20 miles south - No internet! Verizon - voice / p/t site)
4-3	Do you have both internal and external support staff? If, yes please describe who supports your technology?		X		
4-4	How many workstation computers do you currently utilize?				5
4-5	How many servers?				1
4-6	Describe how your workstations connect to your internal network? (e.g. wireless, wired jacks, etc)				**Wired Jacks**
4-7	Do you have diagrams of your current internal network(s)? External network(s)? **Please include a copy of any diagrams that you have when you return this questionnaire**.		X		
4-8	What type of switches and routers do you use?				
4-9	Does the health center have official policies outlining acceptable Internet usage and bandwidth utilization for all employees?		X		
4-10	Does the health center have an updated IT emergency preparedness plan or Disaster Recovery Plan?	X			
4-11	Does the health center have a strategic technology plan that is currently being followed?	X			
4-12	Have you ever participated in a telecom assessment or filled out a similar questionnaire before?		X		
5. External Funding since 1996					
5-1	Have you ever received federal funding for telecom services or infrastructure? If yes, how much and when?		X		
5-2	Have you ever received state funding for telecom services or infrastructure? If yes, how much and when?		X		
5-3	Have you ever received other types of funding for telecom services or infrastructure? If yes, how much and when?		X		

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
1. Current Telecom Environment - Pines Health Services					
	Please answer the following questions to describe your current telecom services				
1-1	Who is/are your current telecom service provider(s)? (e.g. Verizon, AT&T, Pinetree, etc.)				**Verizon**
1-2	Do you have a T-1(s)?	X			
1-3	Do you have DSL service?		X		
1-4	Do you have cable modem service?	X			**Only for some Home based workers (transcriptionists)**
1-5	Do you use other technologies (wireless, satellite, etc.)? If yes, please explain in detail.	X			**Wireless for Home based workers (transcriptionist)**
1-6	How many voice lines/channels do you have?			>100	**T-1 line at each clinic location for shared voice/data (possible 24 channels for voice at each location), plus several CO Trunks at each location.**
1-7	What is your current bandwidth? (e.g. 128kb, 768kb, 1.54mb, etc)			1.5 (T-1)	
1-8	Do you have a Service Level Agreement (SLA), guaranteed bandwidth, with your current vendor?	X			**CIR is 768 for each circuit**
1-9	Do you currently have redundant telecom services? (e.g. a primary and secondary internet connection, a T1 and backup telephone lines)	X			
1-10	How reliable is your service?				**Not very, we're very unhappy with the reliability of our Verizon circuits and their responsiveness when we have problems. This applies to voice,data, internet and LD.**
1-11	What is your current telephony premise equipment? (e.g. a Private Branch Exchange (PBX), Voice Over Internet Protocol (VoIP), Key System, etc)				**PBX with IP telephony. All locations on a common voice network (WAN)**
1-12	If you have a PBX, is it digital or analog?				**Digital**
	Please answer the following questions to describe the technologies and				
1-13	Do you host an FTP - file transfer protocol, server/site?		X		
1-14	Do you host a website (or sites)?		X		
1-15	Do you host an email server?		X		**Mail server provided by Cary**
1-16	Do you use videoconferencing? If yes, what technology(ies) do you use?	X			**ISDN and IP based.**

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
1-17	Do you currently use telemedicine services? If yes, what technology(ies) do you use?	X			**Psychiatry,Genetic counseling, Pediatric Neurology**
1-18	Does a third party vendor provide these services, or do you support in house?				**In-house with added technical support from Cary**
1-19	If the health center currently utilizes wireless technology, how is wireless technology being used across the health center?	X			**Cisco wireless access points to provide wireless access to the lan/wan**
1-20	Do you provide remote access to your employees?	X			**IPSEC VPN connections, Cary also provides SSL based access to some web services for Pines staff (EMR, PACS etc.)**
	Please answer the questions below to describe your telecom service expenses				
1-21	What is your monthly and/or annual expense for voice services?				**app. $5,000**
1-22	What is your monthly and/or annual expense for data services?				**combined with voice as T-1 lines are shared for voice and data.**
1-23	Other expenses? Please describe in detail.				
2. Computer & Software Systems					
	Please answer the questions below to describe your current clinical and practice management software environment				
2-1	Do you currently use software hosted by an Application Service Provider (ASP)?		X		
2-2	Does the health center utilize document management/imaging systems?	X			Xerox Docushare
2-3	Are you currently using EMR (electronic medical record) software? If so, who is your current vendor?		X		
2-4	Are you currently using EPM (enterprise practice management) software? If so, who is your current vendor?	X			CPSI
2-5	What information are you sharing over the internet (e.g. lab results, digital images, etc)				Pines physicians access clinical information at Cary via secure web (https) and VPN.
2-6	What problems do you have managing electronic data? (e.g. files that are too large to handle, unreliable internet connection, etc)				Soemtimes could use more bandwidth during peak usage times
3. Security					
3-1	Do you utilize data encryption when sharing files? If so, explain how and what type of encryption do you use?				PSEC VPN and https
3-2	Do you have a firewall(s)?	X			
3-3	Do you have a VPN - Virtual Private Network?	X			

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
4. Background Information					
4-1	How many locations do you manage?			5	
4-2	How many employees are at each health center location?			114	total
4-3	Do you have both internal and external support staff? If, yes please describe who supports your technology?				**Cary IS Department provides technical support on a contracted basis.**
4-4	How many workstation computers do you currently utilize?			~75	
4-5	How many servers?			~6	
4-6	Describe how your workstations connect to your internal network? (e.g. wireless, wired jacks, etc)				**Some wired (ethernet) and some wireless (802.11b and g)**
4-7	Do you have diagrams of your current internal network(s)? External network(s)? **Please include a copy of any diagrams that you have when you return this questionnaire**.				
4-8	What type of switches and routers do you use?				**Cisco routers and WAPs, 3COM Superstack switches**
4-9	Does the health center have official policies outlining acceptable Internet usage and bandwidth utilization for all employees?	X			
4-10	Does the health center have an updated IT emergency preparedness plan or Disaster Recovery Plan?	X			
4-11	Does the health center have a strategic technology plan that is currently being followed?		X		
4-12	Have you ever participated in a telecom assessment or filled out a similar questionnaire before?	X			
5. External Funding since 1996					
5-1	Have you ever received federal funding for telecom services or infrastructure? If yes, how much and when?		X		
5-2	Have you ever received state funding for telecom services or infrastructure? If yes, how much and when?	X			**Our videononferencing equipment was partialy funded with Federal Grants**
5-3	Have you ever received other types of funding for telecom services or infrastructure? If yes, how much and when?				

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
1. Current Telecom Environment - Pleasant Point					
Please answer the following questions to describe your current telecom services					
1-1	Who is/are your current telecom service provider(s)? (e.g. Verizon, AT&T, Pinetree, etc.)				**AT&T**
1-2	Do you have a T-1(s)?	X			**Frame Relay Network - Fractional T1 Line - Indian Health Service WAN**
1-3	Do you have DSL service?		X		
1-4	Do you have cable modem service?		X		
1-5	Do you use other technologies (wireless, satellite, etc.)? If yes, please explain in detail.		X		
1-6	How many voice lines/channels do you have?				**15 POTS Line into PBX System**
1-7	What is your current bandwidth? (e.g. 128kb, 768kb, 1.54mb, etc)				**128kb Avg. Speed**
1-8	Do you have a Service Level Agreement (SLA), guaranteed bandwidth, with your current vendor?		X		
1-9	Do you currently have redundant telecom services? (e.g. a primary and secondary internet connection, a T1 and backup telephone lines)		X		
1-10	How reliable is your service?				**Very Stable, Rarely Down**
1-11	What is your current telephony premise equipment? (e.g. a Private Branch Exchange (PBX), Voice Over Internet Protocol (VoIP), Key System, etc)				**PBX**
1-12	If you have a PBX, is it digital or analog?				**Digital**
Please answer the following questions to describe the technologies and					
1-13	Do you host an FTP - file transfer protocol, server/site?		X		
1-14	Do you host a website (or sites)?		X		
1-15	Do you host an email server?	X			
1-16	Do you use videoconferencing? If yes, what technology(ies) do you use?		X		

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
1-17	Do you currently use telemedicine services? If yes, what technology(ies) do you use?	X			**Polycom Viewstation PVS-1419-Q, NTSC 512K, ISDN S/T Interface - Used on rare occasions for videoconferencing if necessary**
1-18	Does a third party vendor provide these services, or do you support in house?				**Third Party**
1-19	If the health center currently utilizes wireless technology, how is wireless technology being used across the health center?				**Not Used**
1-20	Do you provide remote access to your employees?		X		
	Please answer the questions below to describe your telecom service expenses				
1-21	What is your monthly and/or annual expense for voice services?				**$600 Monthly**
1-22	What is your monthly and/or annual expense for data services?				
1-23	Other expenses? Please describe in detail.				
2. Computer & Software Systems					
	Please answer the questions below to describe your current clinical and practice management software environment				
2-1	Do you currently use software hosted by an Application Service Provider (ASP)?		X		
2-2	Does the health center utilize document management/imaging systems?		X		
2-3	Are you currently using EMR (electronic medical record) software? If so, who is your current vendor?		X		
2-4	Are you currently using EPM (enterprise practice management) software? If so, who is your current vendor?		X		
2-5	What information are you sharing over the internet (e.g. lab results, digital images, etc)		X		
2-6	What problems do you have managing electronic data? (e.g. files that are too large to handle, unreliable internet connection, etc)				
3. Security					
3-1	Do you utilize data encryption when sharing files? If so, explain how and what type of encryption do you use?		X		
3-2	Do you have a firewall(s)?	X			
3-3	Do you have a VPN - Virtual Private Network?		X		

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
4. Background Information					
4-1	How many locations do you manage?			1	
4-2	How many employees are at each health center location?			36	
4-3	Do you have both internal and external support staff? If, yes please describe who supports your technology?	X			
4-4	How many workstation computers do you currently utilize?			32	
4-5	How many servers?			2	
4-6	Describe how your workstations connect to your internal network? (e.g. wireless, wired jacks, etc)				**Wired**
4-7	Do you have diagrams of your current internal network(s)? External network(s)? **Please include a copy of any diagrams that you have when you return this questionnaire**.	X			**(Attached)**
4-8	What type of switches and routers do you use?				**Cisco Router and 2 Netgear-24 Port Switches**
4-9	Does the health center have official policies outlining acceptable Internet usage and bandwidth utilization for all employees?	X			
4-10	Does the health center have an updated IT emergency preparedness plan or Disaster Recovery Plan?	X			
4-11	Does the health center have a strategic technology plan that is currently being followed?		X		
4-12	Have you ever participated in a telecom assessment or filled out a similar questionnaire before?		X		
5. External Funding since 1996					
5-1	Have you ever received federal funding for telecom services or infrastructure? If yes, how much and when?		X		
5-2	Have you ever received state funding for telecom services or infrastructure? If yes, how much and when?		X		
5-3	Have you ever received other types of funding for telecom services or infrastructure? If yes, how much and when?		X		

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
**1. Current Telecom Environment - LUBEC**					
**Please answer the following questions to describe your current telecom services**					
1-1	Who is/are your current telecom service provider(s)? (e g. Verizon, AT&T, Pinetree, etc.)				**Verizon**
1-2	Do you have a T-1(s)?	Y			**approximately 12 T-1, (includes microwave T-1)**
1-3	Do you have DSL service?	Y			
1-4	Do you have cable modem service?	Y			
1-5	Do you use other technologies (wireless, satellite, etc.)? If yes, please explain in detail.	Y			**Emerg Sat Telephone System in Lubec. Microwave between Lubec and Machias - medical license band - unlicensed - Point to Point**
1-6	How many voice lines/channels do you have?				**45 +**
1-7	What is your current bandwidth? (e.g. 128kb, 768kb, 1.54mb, etc)				**1.5 Meg**
1-8	Do you have a Service Level Agreement (SLA), guaranteed bandwidth, with your current vendor?	Y			
1-9	Do you currently have redundant telecom services? (e.g. a primary and secondary internet connection, a T1 and backup telephone lines)	N			
1-10	How reliable is your service?				**Very Good**
1-11	What is your current telephony premise equipment? (e.g. a Private Branch Exchange (PBX), Voice Over Internet Protocol (VoIP), Key System, etc)				**PBX at Lubec and Machias, VOIP at East Machias Clinic, Key switch at Calais**
1-12	If you have a PBX, is it digital or analog?				**Both**
**Please answer the following questions to describe the technologies and**					
1-13	Do you host an FTP - file transfer protocol, server/site?	Y			
1-14	Do you host a website (or sites)?	Y			
1-15	Do you host an email server?	Y			
1-16	Do you use videoconferencing? If yes, what technology(ies) do you use?	Y			**Both IP and ISDN**

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
1-17	Do you currently use telemedicine services? If yes, what technology(ies) do you use?	Y			**ISDN**
1-18	Does a third party vendor provide these services, or do you support in house?	N			**In House**
1-19	If the health center currently utilizes wireless technology, how is wireless technology being used across the health center?				Laptop Access
1-20	Do you provide remote access to your employees?	Y			
	Please answer the questions below to describe your telecom service expenses				
1-21	What is your monthly and/or annual expense for voice services?				**1,600.00 / month**
1-22	What is your monthly and/or annual expense for data services?				**1,088.00 / month**
1-23	Other expenses? Please describe in detail.				
2. Computer & Software Systems					
	Please answer the questions below to describe your current clinical and practice management software environment				
2-1	Do you currently use software hosted by an Application Service Provider (ASP)?	N			
2-2	Does the health center utilize document management/imaging systems?	N			
2-3	Are you currently using EMR (electronic medical record) software? If so, who is your current vendor?	N			
2-4	Are you currently using EPM (enterprise practice management) software? If so, who is your current vendor?	Y			Companion Tech
2-5	What information are you sharing over the internet (e.g. lab results, digital images, etc)	N			None
2-6	What problems do you have managing electronic data? (e.g. files that are too large to handle, unreliable internet connection, etc)				
3. Security					
3-1	Do you utilize data encryption when sharing files? If so, explain how and what type of encryption do you use?	Y			Blowfish 128 bit
3-2	Do you have a firewall(s)?	Y			
3-3	Do you have a VPN - Virtual Private Network?	Y			

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
4. Background Information					
4-1	How many locations do you manage?	5			**Lubec, East Machias, Machias, Calais, downtown Lubec**
4-2	How many employees are at each health center location?				**150 total**
4-3	Do you have both internal and external support staff? If, yes please describe who supports your technology?				**Internal Only**
4-4	How many workstation computers do you currently utilize?			150	
4-5	How many servers?			16	
4-6	Describe how your workstations connect to your internal network? (e.g. wireless, wired jacks, etc)				**Wireless and wired**
4-7	Do you have diagrams of your current internal network(s)? External network(s)? **Please include a copy of any diagrams that you have when you return this questionnaire**.				
4-8	What type of switches and routers do you use?				**All Types**
4-9	Does the health center have official policies outlining acceptable Internet usage and bandwidth utilization for all employees?	Y			
4-10	Does the health center have an updated IT emergency preparedness plan or Disaster Recovery Plan?	Y			
4-11	Does the health center have a strategic technology plan that is currently being followed?	Y			
4-12	Have you ever participated in a telecom assessment or filled out a similar questionnaire before?	Y			
5. External Funding since 1996					
5-1	Have you ever received federal funding for telecom services or infrastructure? If yes, how much and when?				**E Rate for Internet about 300.00 / month**
5-2	Have you ever received state funding for telecom services or infrastructure? If yes, how much and when?	N			
5-3	Have you ever received other types of funding for telecom services or infrastructure? If yes, how much and when?	N			

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
1. Current Telecom Environment - Sacopee VHC					
	Please answer the following questions to describe your current telecom services				
1-1	Who is/are your current telecom service provider(s)? (e.g. Verizon, AT&T, Pinetree, etc.) PineTree				**Pinetree**
1-2	Do you have a T-1(s)?		x		
1-3	Do you have DSL service?		x		
1-4	Do you have cable modem service?	x			**Adelphia/TimeWarner**
1-5	Do you use other technologies (wireless, satellite, etc.)? If yes, please explain in detail.				**Not at present. We will be installing a wireless internal network for our EMT**
1-6	How many voice lines/channels do you have?			8	
1-7	What is your current bandwidth? (e.g. 128kb, 768kb, 1.54mb, etc)				**2-3 mb/sec**
1-8	Do you have a Service Level Agreement (SLA), guaranteed bandwidth, with your current vendor?		x		
1-9	Do you currently have redundant telecom services? (e.g. a primary and secondary internet connection, a T1 and backup telephone lines)		x		
1-10	How reliable is your service?				**Depends on the power**
1-11	What is your current telephony premise equipment? (e.g. a Private Branch Exchange (PBX), Voice Over Internet Protocol (VoIP), Key System, etc)				**Key System**
1-12	If you have a PBX, is it digital or analog?				
	Please answer the following questions to describe the technologies and				
1-13	Do you host an FTP - file transfer protocol, server/site?		x		
1-14	Do you host a website (or sites)?				**We have a website through Verizon**
1-15	Do you host an email server?				**Considering**
1-16	Do you use videoconferencing? If yes, what technology(ies) do you use?		x		

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
1-17	Do you currently use telemedicine services? If yes, what technology(ies) do you use?		x		
1-18	Does a third party vendor provide these services, or do you support in house?		x		
1-19	If the health center currently utilizes wireless technology, how is wireless technology being used across the health center?				
1-20	Do you provide remote access to your employees?		x		
	Please answer the questions below to describe your telecom service expenses				
1-21	What is your monthly and/or annual expense for voice services?				**16000 annual**
1-22	What is your monthly and/or annual expense for data services?				**15,000 expect to increase with the implementation of NextGen**
1-23	Other expenses? Please describe in detail.				
2. Computer & Software Systems					
	Please answer the questions below to describe your current clinical and practice management software environment				
2-1	Do you currently use software hosted by an Application Service Provider (ASP)?		x		
2-2	Does the health center utilize document management/imaging systems?		x		
2-3	Are you currently using EMR (electronic medical record) software? If so, who is your current vendor?				Will be installing NextGen
2-4	Are you currently using EPM (enterprise practice management) software? If so, who is your current vendor?				NextGen
2-5	What information are you sharing over the internet (e.g. lab results, digital images, etc)				None
2-6	What problems do you have managing electronic data? (e.g. files that are too large to handle, unreliable internet connection, etc)				unreliable internet connection
3. Security					
3-1	Do you utilize data encryption when sharing files? If so, explain how and what type of encryption do you use?				
3-2	Do you have a firewall(s)?	x			
3-3	Do you have a VPN - Virtual Private Network?				Have ability to set one up

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
4. Background Information					
4-1	How many locations do you manage?				
4-2	How many employees are at each health center location?				**42 +/- FTE and PT**
4-3	Do you have both internal and external support staff? If, yes please describe who supports your technology?				**Contracted service**
4-4	How many workstation computers do you currently utilize?				**30**
4-5	How many servers?				**4**
4-6	Describe how your workstations connect to your internal network? (e.g. wireless, wired jacks, etc)				**wired jacks**
4-7	Do you have diagrams of your current internal network(s)? External network(s)? **Please include a copy of any diagrams that you have when you return this questionnaire**.				**NO**
4-8	What type of switches and routers do you use?				**NetGear, HP**
4-9	Does the health center have official policies outlining acceptable Internet usage and bandwidth utilization for all employees?	x			
4-10	Does the health center have an updated IT emergency preparedness plan or Disaster Recovery Plan?		x		
4-11	Does the health center have a strategic technology plan that is currently being followed?	x			Unwritten. Upgrading of sytem (from peer-to-peer to network) to accommodate windows based EPM and EMR
4-12	Have you ever participated in a telecom assessment or filled out a similar questionnaire before?		x		
5. External Funding since 1996					
5-1	Have you ever received federal funding for telecom services or infrastructure? If yes, how much and when?	x			**As part of a collaborative with MPCA**
5-2	Have you ever received state funding for telecom services or infrastructure? If yes, how much and when?		x		
5-3	Have you ever received other types of funding for telecom services or infrastructure? If yes, how much and when?	x			**Davis Foundation Grant - FY06 - 30,000 Sale of SVHC securities - 45,500**

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
1. Current Telecom Environment - Sebasticook Family					
Please answer the following questions to describe your current telecom					
1-1	Who is/are your current telecom service provider(s)? (e.g. Verizon, AT&T, Pinetree, etc.)				**Mid-maine Communications, TDS and Verizon**
1-2	Do you have a T-1(s)?	x			**Newport - SDSL sitelink IP - Canaan T1 Sitelink / Dexter partial**
1-3	Do you have DSL service?	x			**Hartland**
1-4	Do you have cable modem service?		x		
1-5	Do you use other technologies (wireless, satellite, etc.)? If yes, please explain in detail	x			**Wireless**
1-6	How many voice lines/channels do you have?				**16 on lines**
1-7	What is your current bandwidth? (e g. 128kb, 768kb, 1 54mb, etc)				**1552K In Newport 384K in Canaan**
1-8	Do you have a Service Level Agreement (SLA), guaranteed bandwidth, with your current vendor?	x			
1-9	Do you currently have redundant telecom services? (e.g. a primary and secondary internet connection, a T1 and backup telephone lines)		x		
1-10	How reliable is your service?				**It's slow at times. Wireless drops frequently.**
1-11	What is your current telephony premise equipment? (e.g. a Private Branch Exchange (PBX), Voice Over Internet Protocol (VoIP), Key System, etc)				**Key System**
1-12	If you have a PBX, is it digital or analog?				**No PBX**
Please answer the following questions to describe the technologies and					
1-13	Do you host an FTP - file transfer protocol, server/site?		x		
1-14	Do you host a website (or sites)?		x		
1-15	Do you host an email server?	x			
1-16	Do you use videoconferencing? If yes, what technology(ies) do you use?		x		
1-17	Do you currently use telemedicine services? If yes, what technology(ies) do you use?		x		

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
1-18	Does a third party vendor provide these services, or do you support in house?		x		
1-19	If the health center currently utilizes wireless technology, how is wireless technology being used across the health center?	x			Only on laptops
1-20	Do you provide remote access to your employees?	x			**to email**
	Please answer the questions below to describe your telecom service expenses				
1-21	What is your monthly and/or annual expense for voice services?				**Approximately $2000-$3000 Monthly**
1-22	What is your monthly and/or annual expense for data services?				**Approximately $1000 Monthly**
1-23	Other expenses? Please describe in detail.				
2. Computer & Software Systems					
	Please answer the questions below to describe your current clinical and practice management software environment				
2-1	Do you currently use software hosted by an Application Service Provider (ASP)?		x		
2-2	Does the health center utilize document management/imaging systems?		x		Not currently
2-3	Are you currently using EMR (electronic medical record) software? If so, who is your current vendor?		x		Planned for 2007 / Next Gen
2-4	Are you currently using EPM (enterprise practice management) software? If so, who is your current vendor?	x			Ntierpirse as of today - 12/19/06 switching to NextGen
2-5	What information are you sharing over the internet (e g. lab results, digital images, etc)		x		
2-6	What problems do you have managing electronic data? (e.g. files that are too large to handle, unreliable internet connection, etc)				Slow connections - not enough bandwidth
3. Security					
3-1	Do you utilize data encryption when sharing files? If so, explain how and what type of encryption do you use?		x		We do not currrently share any medical files electronically
3-2	Do you have a firewall(s)?	x			
3-3	Do you have a VPN - Virtual Private Network?		x		
4. Background Information					

#	Technology Question	Yes	No	Quantity (if applicable)	Explanation
4-1	How many locations do you manage?			4	
4-2	How many employees are at each health center location?				**Canaan 8 - Hartland 3 - Dexter 6 - Newport 18**
4-3	Do you have both internal and external support staff? If, yes please describe who supports your technology?				**(Internal - Judy Cullen) (External Technology Solutions)**
4-4	How many workstation computers do you currently utilize?			18	
4-5	How many servers?			5	
4-6	Describe how your workstations connect to your internal network? (e g. wireless, wired jacks, etc)				**wired jacks and wireless**
4-7	Do you have diagrams of your current internal network(s)? External network(s)? **Please include a copy of any diagrams that you have when you return this questionnaire**.		x		
4-8	What type of switches and routers do you use?				**(Watchguard Firebox - router) (Dlink - switches)**
4-9	Does the health center have official policies outlining acceptable Internet usage and bandwidth utilization for all employees?	x			
4-10	Does the health center have an updated IT emergency preparedness plan or Disaster Recovery Plan?		x		We have remote backup.
4-11	Does the health center have a strategic technology plan that is currently being followed?		x		
4-12	Have you ever participated in a telecom assessment or filled out a similar questionnaire before?		x		
5-1	Have you ever received federal funding for telecom services or infrastructure? If yes, how much and when?		x		
5-2	Have you ever received state funding for telecom services or infrastructure? If yes, how much and when?		x		
5-3	Have you ever received other types of funding for telecom services or infrastructure? If yes, how much and when?		x		

FQHCs In Maine
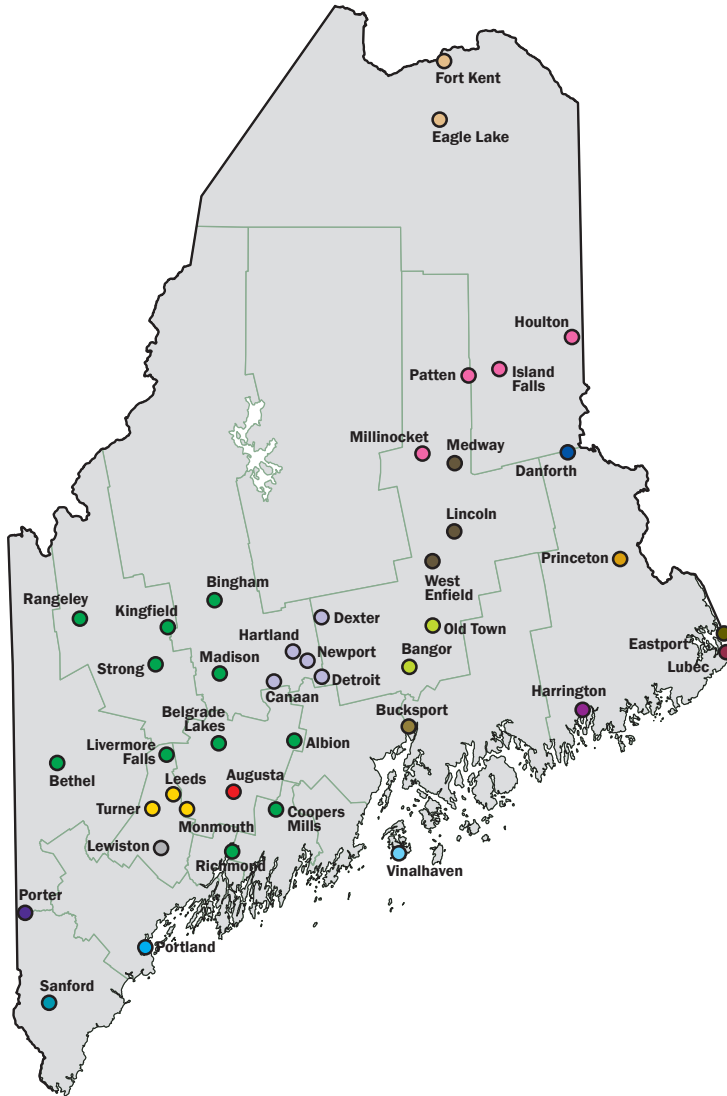
● Bucksport Regional Health Center
● Community Clinical Services
● DFD Russell Medical Center
  — Leeds
  — Monmouth
  — Turner
● East Grand Health Center
● Eastport Health Care
● Fish River Rural Health
  — Eagle Lake
  — Fort Kent
● Harrington Family Health Center
● Health Access Network
  — Lincoln
  — Medway
  — Millinocket
  — West Enfield
● Healthcare for the Homeless
● HealthReach Community Health Centers:
  Belgrade Regional Health Center
  Bethel Family Health Center
  Bingham Area Health Center
  Lovejoy Health Center
    — Albion
  Madison Area Health Center
  Mt. Abram Regional Health Center
    — Kingfield
  Rangeley Region Health Center
  Richmond Area Health Center
  Sheepscot Valley Health Center
    — Coopers Mills
  Strong Area Health Center
  Western Maine Family Health Center
    — Livermore Falls
● Islands Community Medical Center
● Katahdin Valley Health Center
  — Houlton
  — Island Falls
  — Millinocket
  — Patten
● Maine Migrant Health Program
  — STATEWIDE
● Penobscot Community Health Center
  — Bangor
  — Old Town
● Regional Medical Center at Lubec
● Sacopee Valley Health Center
● Sebasticook Family Doctors
  — Canaan
  — Detroit
  — Dexter
  — Hartland
  — Newport
● St. Croix Regional Family Health Center
● Spruce Street Health Center

Fort Kent
Eagle Lake
Houlton
Patten
Island Falls
Millinocket
Medway
Danforth
Lincoln
Princeton
West Enfield
Old Town
Bingham
Dexter
Hartland
Newport
Bangor
Eastport
Lubec
Rangeley
Kingfield
Madison
Detroit
Strong
Canaan
Harrington
Belgrade Lakes
Bucksport
Livermore Falls
Albion
Bethel
Leeds
Augusta
Turner
Coopers Mills
Monmouth
Lewiston
Richmond
Vinalhaven
Porter
Portland
Sanford

	FQHC	Address	Town	State	Zip	Telephone Number	What type of Internet access do you offer for businesses in this area?	What type of access services do you offer for telephone in these areas?	What type of data services do you offer? For example, point to point, private IP, frame relay, or other?	Please provide sample pricing for each service listed.
1	Bucksport Regional Health Center	110 Broadway St.	Bucksport	ME	04416	(207) 469-7371	ENS Regular - 3/786			ENS - $69.95
1a	Bucksport Regional Health Center	74 Main Street, Suite 200	Bucksport	ME	04416	(207) 469-2359	ENS 3/768 or ENS 7/1			ENS - $69 95 or $159 95
Other comments or considerations for this site(s)?:										
2	East Grand Health Center	201 Houlton Rd	Danforth	ME	04424	(207) 448-2347	No Facilities			
Other comments or considerations for this site(s)?:										
3	Eastport Health Center	30 Boynton Street	Eastport	ME	04631	(207) 853-6001	ENS 3/768 or ENS 7/1			ENS - $69 95 or $159 95
3a	Eastport Health Center	3 North Street	Machias	ME	04654	(207) 255-8290	ENS 3/768 or ENS 7/1		T1, DS3, Possibly Fiber, Point-to-Point.	ENS - $69 95 or $159 95, T1 - $599 00, DS3 - $2,199 (up to 10Mbps), Fiber Approximately $450 3Mbps (Price dependent on transport and bandwidth). P-P (Must be engineered to determine price).
3b	Eastport Health Center	12 East Main	Machias	ME	04654	(207) 255-3400	Need Manual Loop Qualification to determine availability and offering.		T1, DS3, Possibly Fiber, Point-to-Point.	DS3 - $2,199 (up to 10Mbps), Fiber Approximately $450 3Mbps (Price dependent on transport and bandwidth). P-P (Must be engineered to determine price).
3c	Eastport Health Center	55 Franklin	Calais	ME	04619	(207) 454-3022	GWI SOHO - Regular or Premium	Business Voice Solutions Available by June, 2007	T1, DS3, Possibly Fiber, Point-to-Point.	Regular - $69.95, Premium $99.95, T1 - $599 00, DS3 - $2,199 (up to 10Mbps), Fiber Approximately $450 3Mbps (Price dependent on Transport and bandwidth). P-P (Must be engineered to determine price).
Other comments or considerations for this site(s)?:										
4	Harrington Family Health Center	81 East Main St.	Harrington	ME	04643	(207) 483-4502	No Facilities			
Other comments or considerations for this site(s)?:										
5	Islesboro Health Center	150 Main Road	Islesboro	ME	04848	(207) 734-2213	No facilities			
Other comments or considerations for this site(s)?:										
6	Islands Community Medical Services	15 Medical Center Loop	Vinalhaven	ME	04863	(207) 863-4341	ENS Regular - 3/786			ENS - $69.95

	FQHC	Address	Town	State	Zip	Telephone Number	What type of Internet access do you offer for businesses in this area?	What type of access services do you offer for telephone in these areas?	What type of data services do you offer? For example, point to point, private IP, frame relay, or other?	Please provide sample pricing for each service listed.
Other comments or considerations for this site(s)?:										
7	St. Croix Regional Family Health Center	136 Mill Street	Princeton	ME	04668	(207) 796-5503	ENS Regular - 3/786			ENS - $69.95
Other comments or considerations for this site(s)?:										
8	Indian Township Health Center	401 Peter Dana Point Road	Princeton	ME	04668	(207) 796-2322	No - DLC - No Copper			
Other comments or considerations for this site(s)?:										
9	Pines Health Services	74 Access Highway	Caribou	ME	04736	(207) 498-2356	GWI SOHO - Regular or Premium	Business Voice Solutions Available by June, 2007	T1, DS3, Possibly Fiber, Point-to-Point.	Regular - $69.95, Premium $99.95, T1 - $599 00, DS3 - $2,199 (up to 10Mbps), Fiber Approximately $450 3 Mbps (Price dependent on Mileage and bandwidth). P-P (Must be engineered to determine price).
9a	Pines Health Services	2 Main Street	Van Buren	ME	04785	(207) 498-1361	ENS 3/768 or ENS 7/1			ENS - $69 95 or $159 95
9b	Pines Health Services	66 Spruce Street	Presque Isle	ME	04769	(207) 769-2025	GWI SOHO - Regular or Premium	Business Voice Solutions Available by June, 2007	T1, DS3, Possibly Fiber, Point-to-Point.	Regular - $69.95, Premium $99.95, T1 - $599 00, DS3 - $2,199 (up to 10Mbps), Fiber approximately $450. for 3Mbps (Price dependent on Mileage and bandwidth). P-P (Must be engineered to determine price).
9c	Pines Health Services	163 Van Buren Road	Caribou	ME	04736	(207) 498-6921	GWI SOHO - Regular	Business Voice Solutions Available by June, 2007	T1, DS3, Possibly Fiber, Point-to-Point.	Regular - $69.95, T1 - $599 00, DS3 - $2,199 (up to 10Mbps), Fiber Approximately $50 3Mbps (Price dependent on Mileage and bandwidth). P-P (Must be engineered to determine price).
9d	Pines Health Services	6 North Carolina Road	Limestone	ME	04750	(207) 328-4631	No DLC - No Copper			
Other comments or considerations for this site(s)?:										
10	Pleasant Point	11 Back Road	Perry	ME	04667	(207) 853-0644	No - DLC - No Copper			
Other comments or considerations for this site(s)?:										
11	Regional Medical Center at Lubec	43 South Lubec Road	Lubec	ME	04652	(207) 733-5541	No facilities			
Other comments or considerations for this site(s)?:										
12	Sacopee Valley Health Center	70 Main Street	Porter	ME	04068	(207) 625-8126	No - Loaded Copper			

FQHC	Address	Town	State	Zip	Telephone Number	What type of Internet access do you offer for businesses in this area?	What type of access services do you offer for telephone in these areas?	What type of data services do you offer? For example, point to point, private IP, frame relay, or other?	Please provide sample pricing for each service listed.
Other comments or considerations for this site(s)?:									
13 Sebasticook Family Doctors	118 Moosehead Trail	Newport	ME	04953	(207) 368-5189	ENS 3/768 or ENS 7/1			ENS - $69 95 or $159 95
13a Sebasticook Family Doctors	370 Main Street	Canaan	ME	04967	(207) 474-6990	ENS 3/768		T1, DS3, Possibly Fiber, Point-to-Point.	ENS - 69.95, T1 - $599.00, DS3 - $2,199 (up to 10Mbps), Fiber (Price dependent on Mileage and bandwid h). P-P (Must be engineered to determine price).
13b Sebasticook Family Doctors	10 Great Moose Drive	Hartland	ME	04943	(207) 938-2408	No Facilities			
13c Sebasticook Family Doctors	29 Church Street	Dexter	ME	04930	(207) 924-5200	ENS 3/768 or ENS 7/1			ENS - $69 95 or $159 95
Other comments or considerations for this site(s)?:									

1. Fiber subject to Availability Price subject to Transport and Bandwidth desired Scalable into he Gigabits.

Prices for anything above T1 solutions are strictly estimates.

2. Business Voice Solutions deliverable no earlier than June, 2007

Prices subject to change

Prices may be adjustable based on term agreements

This does not represent a quote but rather general information to preface further quote discussions.

	FQHC	Address	Town	State	Zip	Telephone Number	What type of Internet access do you offer for businesses in this area?	Please provide sample pricing for each service listed.	What type of access services do you offer for telephone in these areas?	Please provide sample pricing for each service listed.	What type of data services do you offer? For example, point to point, private IP, frame relay, or other?	Please provide sample pricing for each service listed.	
1	Bucksport Regional Health Center	110 Broadway St.	Bucksport	ME	04416	(207) 469-7371	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	
1a	Bucksport Regional Health Center	74 Main Street, Suite 200	Bucksport	ME	04416	(207) 469-2359	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	
Other comments or considerations for this site(s)? Integrated T-1 which carries both voice and data services													
2	East Grand Health Center	201 Houlton Rd	Danforth	ME	04424	(207) 448-2347	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	
Other comments or considerations for this site(s)?: Integrated T-1 which carries both voice and data services													
3	Eastport Health Center	30 Boynton Street	Eastport	ME	04631	(207) 853-6001	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	
3a	Eastport Health Center	3 North Street	Machias	ME	04654	(207) 255-8290	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	
3b	Eastport Health Center	12 East Main	Machias	ME	04654	(207) 255-3400	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	
3c	Eastport Health Center	55 Franklin	Calais	ME	04619	(207) 454-3022	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	
Other comments or considerations for this site(s)? Integrated T-1 which carries both voice and data services													
4	Harrington Family Health Center	81 East Main St.	Harrington	ME	04643	(207) 483-4502	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	**(fed out of Columbia CO)**
Other comments or considerations for this site(s)? Integrated T-1 which carries both voice and data services													
5	Islesboro Health Center	150 Main Road	Islesboro	ME	04848	(207) 734-2213	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	**(fed out of Dark Harbor CO)**
Other comments or considerations for this site(s)? Integrated T-1 which carries both voice and data services													
6	Islands Community Medical Services	15 Medical Center Loop	Vinalhaven	ME	04863	(207) 863-4341	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	
Other comments or considerations for this site(s)? Integrated T-1 which carries both voice and data services													
7	St. Croix Regional Family Health Center	136 Mill Street	Princeton	ME	04668	(207) 796-5503	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	
Other comments or considerations for this site(s)? Integrated T-1 which carries both voice and data services													
8	Indian Township Health Center	401 Peter Dana Point Road	Princeton	ME	04668	(207) 796-2322	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	
Other comments or considerations for this site(s)? Integrated T-1 which carries both voice and data services													
9	Pines Health Services	74 Access Highway	Caribou	ME	04736	(207) 498-2356	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	
9a	Pines Health Services	2 Main Street	Van Buren	ME	04785	(207) 498-1361	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	
9b	Pines Health Services	66 Spruce Street	Presque Isle	ME	04769	(207) 769-2025	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	
9c	Pines Health Services	163 Van Buren Road	Caribou	ME	04736	(207) 498-6921	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	
9d	Pines Health Services	6 North Carolina Road	Limestone	ME	04750	(207) 328-4631	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	
Other comments or considerations for this site(s)? Integrated T-1 which carries both voice and data services													
10	Pleasant Point	1 Back Road	Perry	ME	04667	(207) 853-0644	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	**(fed out of Eastport CO)**

	FQHC	Address	Town	State	Zip	Telephone Number	What type of Internet access do you offer for businesses in this area?	Please provide sample pricing for each service listed.	What type of access services do you offer for telephone in these areas?	Please provide sample pricing for each service listed.	What type of data services do you offer? For example, point to point, private IP, frame relay, or other?	Please provide sample pricing for each service listed.	
Other comments or considerations for this site(s)? Integrated T-1 which carries both voice and data services													
11	Regional Medical Center at Lubec	43 South Lubec Road	Lubec	ME	04652	(207) 733-5541	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	
Other comments or considerations for this site(s)? Integrated T-1 which carries both voice and data services													
12	Sacopee Valley Health Center	70 Main Street	Porter	ME	04068	(207) 625-8126	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	**(fed out of Cornish CO)**
Other comments or considerations for this site(s)? Integrated T-1 which carries both voice and data services													
13	Sebasticook Family Doctors	118 Moosehead Trail	Newport	ME	04953	(207) 368-5189	SDSL	$89 - $602	Dial Tone	$26	all	$89 - $602	
13a	Sebasticook Family Doctors	370 Main Street	Canaan	ME	04967	(207) 474-6990	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	
13b	Sebasticook Family Doctors	10 Great Moose Drive	Hartland	ME	04943	(207) 938-2408	Extended T-1 EEL	$268-$671	n/a	n/a	frame relay	$300 - $600	TDS Territory
13c	Sebasticook Family Doctors	29 Church Street	Dexter	ME	04930	(207) 924-5200	Extended T-1 EEL	$268-$671	Resale Dial Tone	$34.64	all	$268 - $671	
Other comments or considerations for this site(s)? Integrated T-1 which carries both voice and data services													

This does not represent a quote but rather genral information to preface further quote discussions

	FQHC	Address	Town	State	Zip	Telephone Number	What type of Internet access do you offer for businesses in this area?	What type of access services do you offer for telephone in these areas?	What type of data services do you offer? For example, point to point, private IP, frame relay, or other?	Please provide sample pricing for each service listed.
1	Bucksport Regional Health Center	110 Broadway St.	Bucksport	ME	04416	(207) 469-7371				
1a	Bucksport Regional Health Center	74 Main Street, Suite 200	Bucksport	ME	04416	(207) 469-2359				
Other comments or considerations for this site(s)?:										
2	East Grand Health Center	201 Houlton Rd	Danforth	ME	04424	(207) 448-2347	wireless	Current customer		$54.95
Other comments or considerations for this site(s)?:										
3	Eastport Health Center	30 Boynton Street	Eastport	ME	04631	(207) 853-6001	maybe wireless? (see our coverage map)	none		
3a	Eastport Health Center	3 North Street	Machias	ME	04654	(207) 255-8290	"			
3b	Eastport Health Center	12 East Main	Machias	ME	04654	(207) 255-3400	"			
3c	Eastport Health Center	55 Franklin	Calais	ME	04619	(207) 454-3022	"			
Other comments or considerations for this site(s)?:										
4	Harrington Family Health Center	81 East Main St.	Harrington	ME	04643	(207) 483-4502	maybe wireless thru Axiom?			
Other comments or considerations for this site(s)?:										
5	Islesboro Health Center	150 Main Road	Islesboro	ME	04848	(207) 734-2213	use Midcoast Internet			
Other comments or considerations for this site(s)?:										
6	Islands Community Medical Services	15 Medical Center Loop	Vinalhaven	ME	04863	(207) 863-4341	use Midcoast Internet			
Other comments or considerations for this site(s)?:										
7	St. Croix Regional Family Health Center	136 Mill Street	Princeton	ME	04668	(207) 796-5503	wireless in Princeton	not a customer.		
Other comments or considerations for this site(s)?:										
8	Indian Township Health Center	401 Peter Dana Point Road	Princeton	ME	04668	(207) 796-2322	wireless in Princeton	not a customer.		

	FQHC	Address	Town	State	Zip	Telephone Number	What type of Internet access do you offer for businesses in this area?	What type of access services do you offer for telephone in these areas?	What type of data services do you offer? For example, point to point, private IP, frame relay, or other?	Please provide sample pricing for each service listed.
Other comments or considerations for this site(s)?:										
9	Pines Health Services	74 Access Highway	Caribou	ME	04736	(207) 498-2356	wireless is possible	not a customer.		
9a	Pines Health Services	2 Main Street	Van Buren	ME	04785	(207) 498-1361	wireless is possible	not a customer.		
9b	Pines Health Services	66 Spruce Street	Presque Isle	ME	04769	(207) 769-2025	wireless is possible	not a customer.		
9c	Pines Health Services	163 Van Buren Road	Caribou	ME	04736	(207) 498-6921	wireless is possible	not a customer.		
9d	Pines Health Services	6 North Carolina Road	Limestone	ME	04750	(207) 328-4631	wireless	Current customer		
Other comments or considerations for this site(s)?:										
10	Pleasant Point	1 Back Road	Perry	ME	04667	(207) 853-0644	wireless is possible	not a customer.		
Other comments or considerations for this site(s)?:										
11	Regional Medical Center at Lubec	43 South Lubec Road	Lubec	ME	04652	(207) 733-5541	wireless is possible	not a customer.		
Other comments or considerations for this site(s)?:										
12	Sacopee Valley Health Center	70 Main Street	Porter	ME	04068	(207) 625-8126	try Points South Internet			
Other comments or considerations for this site(s)?:										
13	Sebasticook Family Doctors	118 Moosehead Trail	Newport	ME	04953	(207) 368-5189	try Mainelywired.net			
13a	Sebasticook Family Doctors	370 Main Street	Canaan	ME	04967	(207) 474-6990	try Mainelywired.net			
13b	Sebasticook Family Doctors	10 Great Moose Drive	Hartland	ME	04943	(207) 938-2408	try Mainelywired.net			
13c	Sebasticook Family Doctors	29 Church Street	Dexter	ME	04930	(207) 924-5200	try Mainelywired.net			

FQHC	Address	Town	State	Zip	Telephone Number	What type of Internet access do you offer for businesses in this area?	What type of access services do you offer for telephone in these areas?	What type of data services do you offer? For example, point to point, private IP, frame relay, or other?	Please provide sample pricing for each service listed.

Other comments or considerations for this site(s)?:

This does not represent a quote but
rather general information to
preface further quote discussions.

We mainly offer IP based services… it is possible for a customer to use Vonage, but we don't actively support it.
See our site at www.pioneerwireless.net.   We have coverage in many areas from Madawaska to Machias and Lincoln.   Our motto is "Redundancy for Reliability!"

Because we are a Verizon customer, we can offer 56K, FrameRelay T1's, DS3's anywhere in the VZ footprint. Prices vary widely.

	FQHC	Address	Town	State	Zip	Telephone Number	What type of Internet access do you offer for businesses in this area?	What type of access services do you offer for telephone in these areas?	What type of dedicated data services do you offer?	Please provide sample pricing for each service listed.	Time Warner or former Adelphia
1	Bucksport Regional Health Center	110 Broadway St.	Bucksport	ME	04416	(207) 469-7371	Cable Modem + Fiber Optic	None	Fiber Optic 3 x 3 Mb/s +	Attached	TW
1a	Bucksport Regional Health Center	74 Main Street, Suite 200	Bucksport	ME	04416	(207) 469-2359	Cable Modem + Fiber Optic	None	Fiber Optic 3 x 3 Mb/s +	Attached	TW
	Other comments or considerations for this site(s)?: Business Class Asymmetrical Cable Modem Offered/Fiber Optic Built To Suit - Costs Vary										
2	East Grand Health Center	201 Houlton Rd	Danforth	ME	04424	(207) 448-2347	Do Not Service	Do Not Service	Do Not Service	Do Not Service	Do Not Service
	Other comments or considerations for this site(s)?: TW is not the Cable Provider For This Town										
3	Eastport Health Center	30 Boynton Street	Eastport	ME	04631	(207) 853-6001	Do Not Service	Do Not Service	Do Not Service	Do Not Service	Do Not Service
3a	Eastport Health Center	3 North Street	Machias	ME	04654	(207) 255-8290	Do Not Service	Do Not Service	Do Not Service	Do Not Service	Do Not Service
3b	Eastport Health Center	12 East Main	Machias	ME	04654	(207) 255-3400	Do Not Service	Do Not Service	Do Not Service	Do Not Service	Do Not Service
3c	Eastport Health Center	55 Franklin	Calais	ME	04619	(207) 454-3022	Cable Modem + Fiber Optic	None	Fiber Optic 3 x 3 Mb/s +	Attached	TW
	Other comments or considerations for this site(s)?: We do not service Eastport or Machias, Think it is Pine Tree Cable? In Calais, we offer Business Class Asymmetrical Cable Modem Offered/Fiber Optic Built To Suit - Costs Vary										
4	Harrington Family Health Center	81 East Main St.	Harrington	ME	04643	(207) 483-4502	NO Service Avail At Today	None	NO Service Avail At Today	NO Service Avail At Today	TW
	Other comments or considerations for this site(s)?: We are the cable company here, no HSD capabilities at this time, in future though										
5	Islesboro Health Center	150 Main Road	Islesboro	ME	04848	(207) 734-2213	Do Not Service	Do Not Service	Do Not Service	Do Not Service	Do Not Service
	Other comments or considerations for this site(s)?: TW is not the Cable Provider For This Town										
6	Islands Community Medical Services	15 Medical Center Loop	Vinalhaven	ME	04863	(207) 863-4341	Cable Modem + Fiber Optic	None	Fiber Optic 3 x 3 Mb/s +	Attached	TW
	Other comments or considerations for this site(s)?: Business Class Asymmetrical Cable Modem Offered/Fiber Optic Built To Suit - Costs Vary										
7	St. Croix Regional Family Health Center	136 Mill Street	Princeton	ME	04668	(207) 796-5503	Cable Modem + Fiber Optic	None	Fiber Optic 3 x 3 Mb/s +	Attached	TW
	Other comments or considerations for this site(s)?: Business Class Asymmetrical Cable Modem Offered/F ber Optic Built To Suit - Costs Vary										
8	Indian Township Health Center	401 Peter Dana Point Road	Princeton	ME	04668	(207) 796-2322	Cable Modem + Fiber Optic	None	Fiber Optic 3 x 3 Mb/s +	Attached	TW

	FQHC	Address	Town	State	Zip	Telephone Number	What type of Internet access do you offer for businesses in this area?	What type of access services do you offer for telephone in these areas?	What type of dedicated data services do you offer?	Please provide sample pricing for each service listed.	Time Warner or former Adelphia
Other comments or considerations for this site(s)?: Business Class Asymmetrical Cable Modem Offered/F ber Optic Built To Suit - Costs Vary										
9	Pines Health Services	74 Access Highway	Caribou	ME	04736	(207) 498-2356	Modem/Prolink/Fiber	None	1.8x1.8 Mb/s Prolink/3 Mb/s+ Fiber	Attached	TW
9a	Pines Health Services	2 Main Street	Van Buren	ME	04785	(207) 498-1361	Modem/Prolink/Fiber	None	1.8x1.8 Mb/s Prolink/3 Mb/s+ Fiber	Attached	TW
9b	Pines Health Services	66 Spruce Street	Presque Isle	ME	04769	(207) 769-2025	Modem/Prolink/Fiber	None	1.8x1.8 Mb/s Prolink/3 Mb/s+ Fiber	Attached	TW
9c	Pines Health Services	163 Van Buren Road	Caribou	ME	04736	(207) 498-6921	Modem/Prolink/Fiber	None	1.8x1.8 Mb/s Prolink/3 Mb/s+ Fiber	Attached	TW
9d	Pines Health Services	6 North Carolina Road	Limestone	ME	04750	(207) 328-4631	Modem/Prolink/Fiber	None	1.8x1.8 Mb/s Prolink/3 Mb/s+ Fiber	Attached	TW
Other comments or considerations for this site(s)?: Original TW property (pre-Adelphia) - We can offer Business Class Asymmetrical Cable Modem - 1.8 x 1.8 Mb/s Prolink Cable Modem and Fiber Optic Connections - Built To Suit										
10	Pleasant Point	1 Back Road	Perry	ME	04667	(207) 853-0644	Do Not Service	Do Not Service	Do Not Service	Do Not Service	Do Not Service
Other comments or considerations for this site(s)?: TW is not the Cable Provider For This Town										
11	Regional Medical Center at Lubec	43 South Lubec Road	Lubec	ME	04652	(207) 733-5541	Do Not Service	Do Not Service	Do Not Service	Do Not Service	Do Not Service
Other comments or considerations for this site(s)?: TW is not the Cable Provider For This Town										
12	Sacopee Valley Health Center	70 Main Street	Porter	ME	04068	(207) 625-8126	Cable Modem + Fiber Optic	None	Fiber Optic 3 x 3 Mb/s +	Attached	TW
Other comments or considerations for this site(s)?: Business Class Asymmetrical Cable Modem Offered/F ber Optic Built To Suit - Costs Vary										
13	Sebasticook Family Doctors	118 Moosehead Trail	Newport	ME	04953	(207) 368-5189	Cable Modem + Fiber Optic	None	Fiber Optic 3 x 3 Mb/s +	Attached	TW
13a	Sebasticook Family Doctors	370 Main Street	Canaan	ME	04967	(207) 474-6990	Cable Modem + Fiber Optic	None	Fiber Optic 3 x 3 Mb/s +	Attached	TW

	FQHC	Address	Town	State	Zip	Telephone Number	What type of Internet access do you offer for businesses in this area?	What type of access services do you offer for telephone in these areas?	What type of dedicated data services do you offer?	Please provide sample pricing for each service listed.	Time Warner or former Adelphia
13b	Sebasticook Family Doctors	10 Great Moose Drive	Hartland	ME	04943	(207) 938-2408	Cable Modem + Fiber Optic	None	Fiber Optic 3 x 3 Mb/s +	Attached	TW
13c	Sebasticook Family Doctors	29 Church Street	Dexter	ME	04930	(207) 924-5200	Cable Modem + Fiber Optic	None	Fiber Optic 3 x 3 Mb/s +	Attached	TW

Other comments or considerations for this site(s)?: Business Class Asymmetrical Cable Modem Offered/F ber Optic Built To Suit - Costs Vary

This does not represent a quote but rather general information to preface further quote discussions.

	FQHC	Address	Town	State	Zip	Telephone Number	What type of Internet access do you offer for businesses in this area?	What type of access services do you offer for telephone in these areas?	What type of data services do you offer? For example, point to point, private IP, frame relay, or other?	Please provide sample pricing for each service listed.
1	Bucksport Regional Health Center	110 Broadway St.	Bucksport	ME	04416	(207) 469-7371	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, DS3, **ATM** DS1, DS3, OC3, **EPL** 10-600 Mb	See Below
1a	Bucksport Regional Health Center	74 Main Street, Suite 200	Bucksport	ME	04416	(207) 469-2359	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, DS3, **ATM** DS1, DS3, OC3, **EPL** 10-600 Mb	See Below
Other comments or considerations for this site(s)?:										
2	East Grand Health Center	201 Houlton Rd	Danforth	ME	04424	(207) 448-2347	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, **ATM** DS1	See Below

FQHC	Address	Town	State	Zip	Telephone Number	What type of Internet access do you offer for businesses in this area?	What type of access services do you offer for telephone in these areas?	What type of data services do you offer? For example, point to point, private IP, frame relay, or other?	Please provide sample pricing for each service listed.
Other comments or considerations for this site(s)?:									
3 Eastport Health Center	30 Boynton Street	Eastport	ME	04631	(207) 853-6001	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, **ATM** DS1	See Below
3a Eastport Health Center	3 North Street	Machias	ME	04654	(207) 255-8290	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, DS3 , **ATM** DS1, DS3, OC3, **EPL** 10-600 Mb	See Below
3b Eastport Health Center	12 East Main	Machias	ME	04654	(207) 255-3400	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, DS3 , **ATM** DS1, DS3, OC3, **EPL** 10-600 Mb	See Below
3c Eastport Health Center	55 Franklin	Calais	ME	04619	(207) 454-3022	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, DS3 , **ATM** DS1, DS3*, **EPL** 10-100 Mb	See Below

	FQHC	Address	Town	State	Zip	Telephone Number	What type of Internet access do you offer for businesses in this area?	What type of access services do you offer for telephone in these areas?	What type of data services do you offer? For example, point to point, private IP, frame relay, or other?	Please provide sample pricing for each service listed.
Other comments or considerations for this site(s)?:										
4	Harrington Family Health Center	81 East Main St.	Harrington	ME	04643	(207) 483-4502	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, DS3 , **ATM** DS1, DS3*, **EPL** 10-100 Mb	See Below
Other comments or considerations for this site(s)?:										
5	Islesboro Health Center	150 Main Road	Islesboro	ME	04848	(207) 734-2213	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, DS3 , **ATM** DS1, DS3	See Below
Other comments or considerations for this site(s)?:										
6	Islands Community Medical Services	15 Medical Center Loop	Vinalhaven	ME	04863	(207) 863-4341	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, DS3 , **ATM** DS1, DS3	See Below

	FQHC	Address	Town	State	Zip	Telephone Number	What type of Internet access do you offer for businesses in this area?	What type of access services do you offer for telephone in these areas?	What type of data services do you offer? For example, point to point, private IP, frame relay, or other?	Please provide sample pricing for each service listed.
Other comments or considerations for this site(s)?:										
7	St. Croix Regional Family Health Center	136 Mill Street	Princeton	ME	04668	(207) 796-5503	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, **ATM** DS1	See Below
Other comments or considerations for this site(s)?:										
8	Indian Township Health Center	401 Peter Dana Point Road	Princeton	ME	04668	(207) 796-2322	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, **ATM** DS1	See Below
Other comments or considerations for this site(s)?:										
9	Pines Health Services	74 Access Highway	Car bou	ME	04736	(207) 498-2356	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, DS3 , **ATM** DS1, DS3, OC3, **EPL** 10-600 Mb	See Below

	FQHC	Address	Town	State	Zip	Telephone Number	What type of Internet access do you offer for businesses in this area?	What type of access services do you offer for telephone in these areas?	What type of data services do you offer? For example, point to point, private IP, frame relay, or other?	Please provide sample pricing for each service listed.
9a	Pines Health Services	2 Main Street	Van Buren	ME	04785	(207) 498-1361	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, DS3, **ATM** DS1, DS3, OC3, **EPL** 10-600 Mb	See Below
9b	Pines Health Services	66 Spruce Street	Presque Isle	ME	04769	(207) 769-2025	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, DS3, **ATM** DS1, DS3, OC3, **EPL** 10-600 Mb	See Below
9c	Pines Health Services	163 Van Buren Road	Car bou	ME	04736	(207) 498-6921	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, DS3, **ATM** DS1, DS3, OC3, **EPL** 10-600 Mb	See Below
9d	Pines Health Services	6 North Carolina Road	Limestone	ME	04750	(207) 328-4631	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****		**T1** Point to Point, **Frame Relay** 384, 512, DS1, DS3, **ATM** DS1, DS3, OC3, **EPL** 10-600 Mb	See Below

FQHC	Address	Town	State	Zip	Telephone Number	What type of Internet access do you offer for businesses in this area?	What type of access services do you offer for telephone in these areas?	What type of data services do you offer? For example, point to point, private IP, frame relay, or other?	Please provide sample pricing for each service listed.
Other comments or considerations for this site(s)?:									
10 Pleasant Point	1 Back Road	Perry	ME	04667	(207) 853-0644	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, **ATM** DS1	See Below
Other comments or considerations for this site(s)?:									
11 Regional Medical Center at Lubec	43 South Lubec Road	Lubec	ME	04652	(207) 733-5541	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, **ATM** DS1	See Below
Other comments or considerations for this site(s)?:									
12 Sacopee Valley Health Center	70 Main Street	Porter	ME	04068	(207) 625-8126	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, DS3 , **ATM** DS1, DS3	See Below

Other comments or considerations for this site(s)?:

	FQHC	Address	Town	State	Zip	Telephone Number	What type of Internet access do you offer for businesses in this area?	What type of access services do you offer for telephone in these areas?	What type of data services do you offer? For example, point to point, private IP, frame relay, or other?	Please provide sample pricing for each service listed.
13	Sebasticook Family Doctors **	118 Moosehead Trail	Newport	ME	04953	(207) 368-5189	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, DS3, **ATM** DS1, DS3, OC3, **EPL** 10-600 Mb	See Below
13a	Sebasticook Family Doctors **	370 Main Street	Canaan	ME	04967	(207) 474-6990	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, DS3, **ATM** DS1, DS3, OC3, **EPL** 10-600 Mb	See Below
13b	Sebasticook Family Doctors **	10 Great Moose Drive	Hartland	ME	04943	(207) 938-2408	Existing Frame Relay & ATM via Verizon VSSI***	Independent Telephone Company.	**T1** Point to Point, **Frame Relay** 384, 512, DS1, **ATM** DS1	Independent Telephone Company, depending on Tariff, additional charges may apply
13c	Sebasticook Family Doctors **	29 Church Street	Dexter	ME	04930	(207) 924-5200	Existing Frame Relay & ATM via Verizon VSSI*** DSL Where Loop Qualified, Verizon Business Dedicated Internet ****	POTS, Business Lines, Flexpath T1, ISDN PRI	**T1** Point to Point, **Frame Relay** 384, 512, DS1, DS3, **ATM** DS1, DS3, OC3, **EPL** 10-600 Mb	See Below

FQHC	Address	Town	State	Zip	Telephone Number	What type of Internet access do you offer for businesses in this area?	What type of access services do you offer for telephone in these areas?	What type of data services do you offer? For example, point to point, private IP, frame relay, or other?	Please provide sample pricing for each service listed.

Other comments or considerations for this site(s)?:

This does not represent a quote but rather general information to preface further quote discussions.

Notes:
* ATM (and Frame Relay) DS3 (45 Mb), Subrated DS3, OC3 etc. is provided over Fiber Optic Cable. Tariff's limited availability of DS3 ATM to within 50 miles of the nearest ATM Switch.
 Beyond 50 miles the customer may be subject to additional charges. We do have DS3 customers in Calais.

** Sebasticook Family Doctors is part of Eastern Maine Healthcare Systems, and is able to share in Corporate Pricing available to EMHS

*** Existing Frame Relay and ATM customer are able to utilize a PVC (Private Virtual Circuit) to attach to the Verizon VSSI POP in Portland for Internet Access.
The Service is "grandfathered" for existing customers, and offers Internet access for the price of bandwidth, without distance sensitivity.

**** Verizon Business Internet Dedicated is available via T1 and T3 access. Internet Pricing (former UUNET) is bandwidth dependent. T3 access is mileage sensitive.

DSL is available to customers who are within the distance limits of the service and who have unrestricted copper cable access to the DSL serving office.
DSL availability and speed can be determined by visiting www.verizon.com and entering the customers phone number that will be used for the service.
DSL speed is generally a function of distance from the DSL Serving Office.

ATM and Frame Relay services are available throughout Maine, through agreements in place between Verizon and the Independent Telephone Companies.

Fiber based services (ATM DS3 and higher, Frame Relay DS3 and higher, all EPL (Ethernet Private Line)) requires Fiber to the customer premise.
Depending upon local facilities, Interoffice facilities, weather, etc., lead times on orders may be up to 180 days. Average Installation is 90-120 days.

EPL (Ethernet Private Line) is a SONET based service available throughout the Verizon territory. While SONET, it appears to the user as point to point Ethernet transport.
Both customer points must be within the Verizon territory.

Pricing Notes:
Does not include Non-recurring charges, or any special construction charges if applicable
Tariff Rates (PUC vs FCC) similar for Frame Relay and ATM. Quite Different for T1. EPL is FCC. Internet Access is non-tariff

Sample Pricing   **12 Months**   **36 Months** **60 Months**

FQHC	Address	Town	State	Zip	Telephone Number	What type of Internet access do you offer for businesses in this area?	What type of access services do you offer for telephone in these areas?	What type of data services do you offer? For example, point to point, private IP, frame relay, or other?	Please provide sample pricing for each service listed.
ISDN PRI					$ 780	$ 702	$ 624	Various Price Plans are Available	
Frame Relay									
Frame Relay 384 Kb					$ 477	$ 445	$ 386		
Frame Relay 1.5 Mb (DS1)					$ 776	$ 726	$ 630		
Frame Relay Subrate DS3 (10 Mb)					$ 3,180	$ 2,850	$ 2,650		
Frame Relay Full DS3 (45 Mb)					$ 4,300	$ 3,800	$ 3,600		
ATM									
ATM 1.5 Mb (DS1) Flat Rate (Non-Distance Sensitive)					$ 813	$ 691	$ 650		
ATM Incremental DS3 Tier 1 (5 Miles of Serving Office)					$ 2,250	$ 1,913	$ 1,800	Plus $75 per 5 Mb	
ATM Incremental DS3 Tier 2 5- 25 Miles of Serving Office)					$ 4,063	$ 3,454	$ 3,250	Plus $75 per 5 Mb	
ATM Incremental DS3 Tier 3 25 - 50 Miles of Serving Office)					$ 7,250	$ 6,163	$ 5,800	Plus $75 per 5 Mb	
ATM Full DS3 Tier 1 (5 Miles of Serving Office)					$ 2,891	$ 2,457	$ 2,313		
ATM Full DS3 Tier 2 (5- 25 Miles of Serving Office)					$ 4,704	$ 3,998	$ 3,763		
ATM Full DS3 Tier 3 (25 - 50 Miles of Serving Office)					$ 7,891	$ 6,707	$ 6,313		
With Exception of Presque Isle (Tier 1) all locations listed are Tier 2 or 3									
Point to Point T1 (Voice or Data)									
FCC Local T1 (within same Serving Office)					$ 463	$ 347	$ 301		
FCC Interoffice T1 (52 Miles - Sample)					$ 1,507	$ 1,130	$ 980		
PUC Local T1 (within same Serving Office)					$ 622	$ 441	$ 392		
PUC Interoffice T1 (52 Miles - Sample)					$ 2,155	$ 1,581	$ 1,405		
Ethernet Private Line (via SONET)									
10 Mb within Same Serving Office					$ 2,400	$ 1,800	$ 1,440		
50 Mb within Same Serving Office					$ 3,840	$ 2,940	$ 2,400		
10 Mb Interoffice (52 Miles - Sample)					$ 7,752	$ 5,918	$ 4,896		
50 Mb Interoffice (52 Miles - Sample)					$ 10,140	$ 8,112	$ 6,734		

Verizon Business Internet Access at T1 level is not distance sensitive at $750 for T1, $1400 for 2 X T1 etc.