
# Mobile Community Health Network

**Quarterly Status Report**

**HRSA/Office for the Advancement of Telehealth Grant Number:** H2AIT16625-02-02

**Date:** Dec 31, 2010

# Abstract

**Service Area:** The project serves rural residents of six South Texas counties (all of Aransas, Bee, Jim Wells, and Kleberg Counties, and rural census tracts of Nueces and San Patricio Counties). Five of the six counties are primary care HPSAs; all six are MUAs.

**Needs, Objectives, and Projected Outcomes:** The rural target population exhibits poverty, underinsurance, and chronic disease; especially diabetes, obesity and asthma at rates far in excess of national norms. The project's goals are to utilize tele-health to improved health outcomes for patients with Type 2 diabetes and asthma through the use of a broad based, social networking model of telehomecare.

Net**work Development:** The Network consists of 1 hub/site and 9 primary care clinics. In reality, the Network is comprised of many more points of referral throughout the community including schools, health clubs, health fairs, peer referrals, etc..., and with very little dependancy on referrals from traditional points of health care delivery.

**Actual Patients/Persons Served:** The first five quarters of this innovative approach to chronic health care delivery have resulted in 10,000 members including approximately 4,000 net adds during Q1 of year 2 of the grant. 20,000 additional lives will come online during Q2 of year 2 due to a significant level of effort by the health plan and healthimo during the quarter to prepare for the enrollment of all health plan members with diagnosed childhood asthma. Certain terms require clear re-definition including the notion of 'patients served' and 'rural vs. urban'. Because patient encounters do not depend on a clinic-based relationship it is incorrect to think of the patients enrolled as members are somehow being tied to a traditional hospital, clinic or even mobile health van. We do not require them to register with a clinic affiliation or even with a home address. Our patients are free-living members of the community identified by zip code or cross-referencing their phone number to telco central office NPA/NXX as a location proximity.

**Evaluation:** National authorities in all-age diabetes and childhood asthma will evaluate the project for outcome measures. The project aims to engage people from home including capturing diagnostic data from home to identify, educate and refer people with undiagnosed and unmanaged diabetes. We intend to demonstrate a significant reduction in HbA1c for those people, especially in rural South Texas, who are least likely to access quality care. The asthma arm of the project intends to improve compliance to recognized standards of care including the percentage of patients with a current action plan, adherence to the action plan and improved awareness of patient-specific triggers. Success will be measured by capturing baseline health plan data to assess the intervention's ability to decrease ED utilization and self-reported data to assess decreased school absenteeism due to asthma and days with symptoms (aka "asthma morbidity").

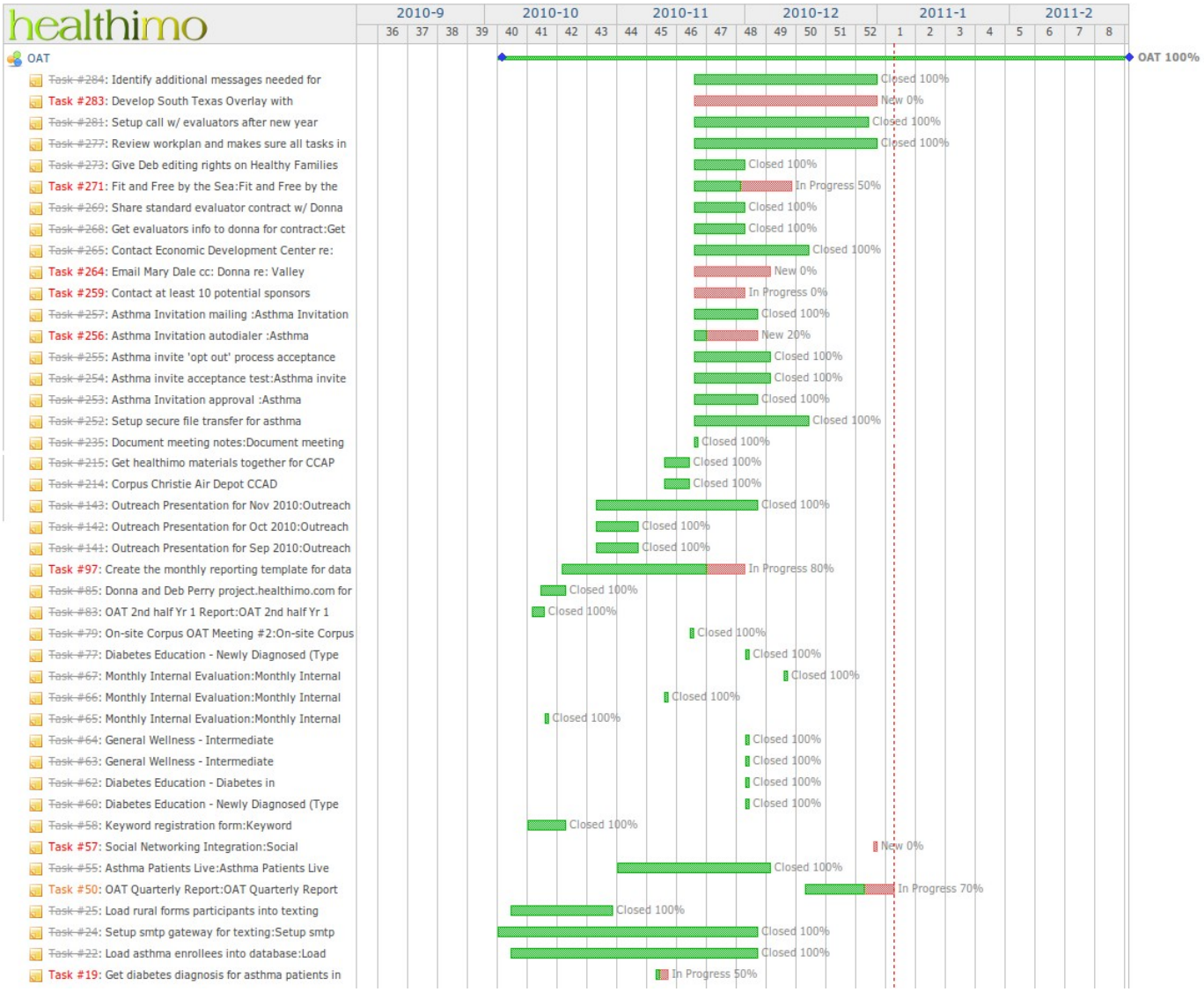
**Outcomes:** The Network intends to improve diabetes self-care and glycemic control for three rural target populations. Outcomes include more appropriate use of health services, patient/provider satisfaction, and cost-effectiveness of a health-focused social networking model. Capturing data from patients who already see a physician is one aspect of traditional telehealth; innovating new models of care to identify people in need of care yet living with unmanaged chronic health conditions, then to engage in self-care and physician care with hard outcomes data is entirely another and one which clearly has the potential to demonstrate impact on the traditional healthcare system.

# Executive Summary

Upon award notification, the project director and project manager initiated a strategic planning session to discuss the lessons learned from year one of the project, as well as to formulate strategies that would capitalize on those lessons learned. The desired outcome of this planning session was to develop a comprehensive overall project plan that would lend itself to achieving the goals of the project.

Ongoing and efficient communication was a challenge during Year 1 of this project. In an effort to overcome those communication barriers, it was identified that an ongoing internal communication strategy was necessary. During the initial strategic planning session this quarter the entire OAT team agreed that there was value to conducting at a minimum quarterly strategic planning sessions (on location), as well as monthly conference calls. Additionally, the entire OAT team is utilizing a project management tool that was developed by healthimo that allows the team to be informed on the status of all tasks and deliverables associated with the project. This secure and collaborative project management tool (https) is accessible from any location by authorized members of the team. A snapshot of the gantt chart view of the project tasks follows:



Ongoing outreach activities continued to play a very important role in year two's first quarter. Program registration continued throughout the quarter, increasing in both small and large increments through individual clinic site participation as well as non-traditional, non-medical partnership involvement and community events. Registration efforts via community outreach culminated in a total of approximately 10,000 enrollees since launch of the Network in January 2010.

The initial outreach/marketing strategy for this quarter was to be very similar to the efforts used throughout the past year. Specifically, the Outreach Coordinator and Project Manager would continue to focus their efforts on the community outreach activities while continuing to maintain a close relationship with individual site partners. Similar challenges were found throughout the quarter. Success from individual site partners varied, but as in the past, hinged on one or several owners being incentivized by a myriad of ways. New partnerships were slow to develop and laden with skepticism and questions slowing relationship development. In addition, the Outreach Coordinator and Project Manager investigated additional opportunities to engage non-traditional health care patients not originating from clinics, but various other outlets.

Although traditional outreach remained important during the first quarter, efforts during the second half of the project year are slated to migrate away from ongoing registration and site partners and more towards a business development strategy in support of self-sustainability goals. "Leave behind" collateral will be developed to secure future business partnerships including large retailers, grocery chains, convenience marts and the like.

Additional marketing and promotion included preparing to release registration milestone information and business partnership development.

A common understanding of this intervention method has been reached amongst the various partners in the Network. This comfort level with the design makes it possible for the Driscoll Children's Health Plan to use its rich database of patients and diagnosed health conditions to support the outreach efforts. This clearly demonstrates evidence of maturation of the project. Obtaining rich data even prior to enrollment is helping to increase effectiveness as well as creating a cost-effective community of thousands with minimal incremental cost for further deployment of innovative home telehealth strategies.

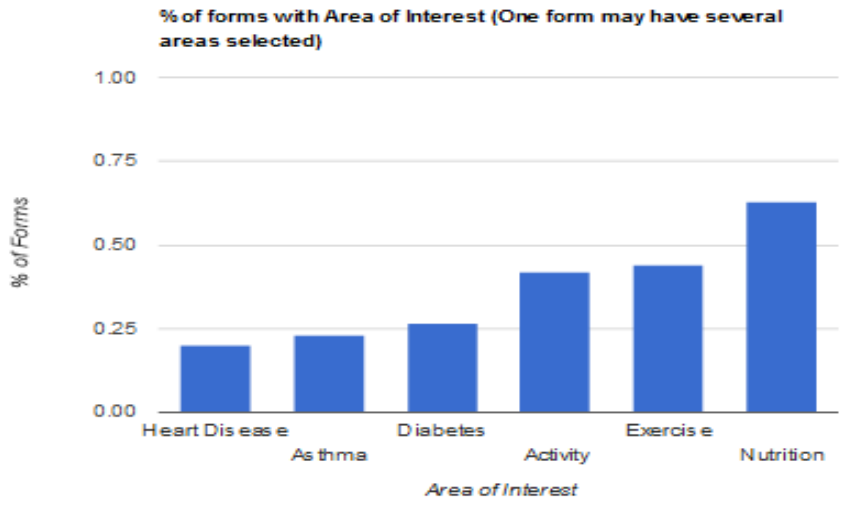
This quarter included a change in roles for several of the Network principles including a new Project Director and the previous Project Director transitioning to the role of a diabetes clinical consultant. No impact.

Due to the dramatic increase in the number of patients served versus the original plan will create several challenges for the team. Gone are any possibilities of simply applying more hours to the task. The only way to address the needs of this large patient population is through automation of every possible system and process including accurate and timely reporting to ensure high quality and comprehensive service delivery. We are dealing now with the need to identify a whole new set of metrics in terms of how we manage the high numbers of patients as well as a broad set of clinical metrics.

# Overall Performance:

**Existing Goals/Objectives**

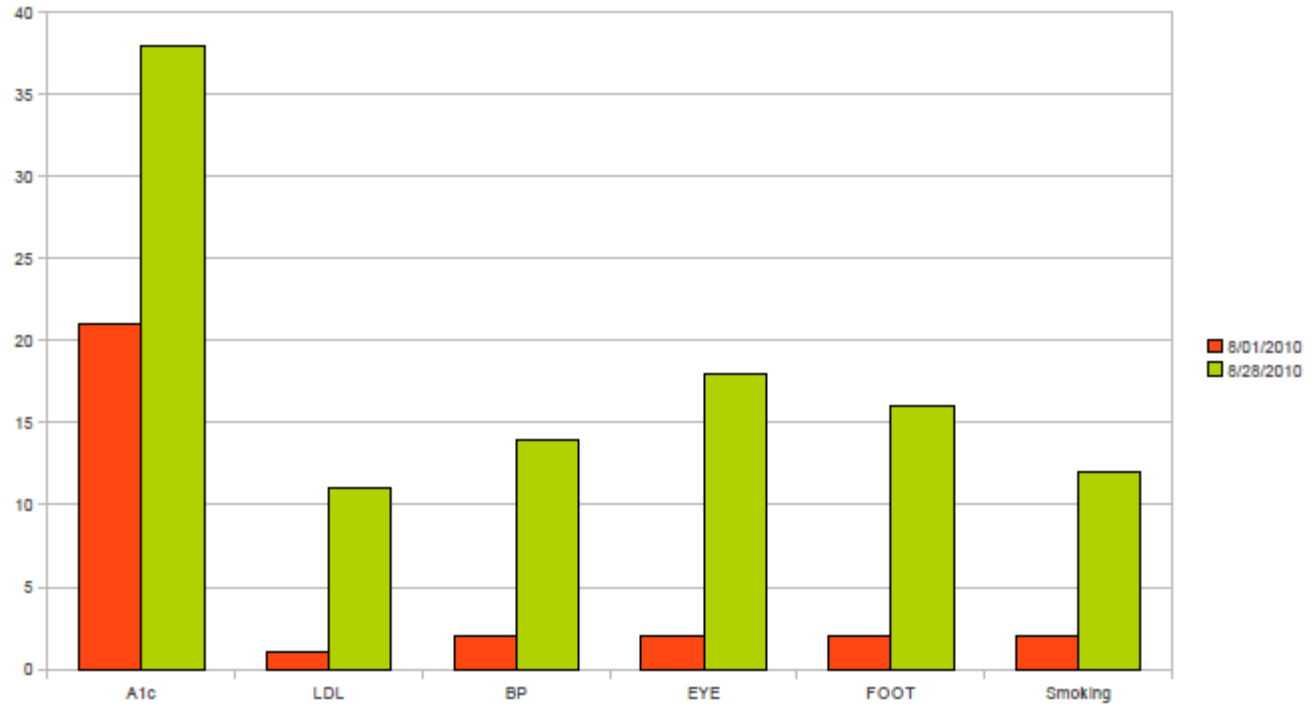
Roughly 1 in 4 of the members enrolled who have shared their interests profiled with diabetes as well as 1 in 4 showing interest in asthma. This totals approximately 2,000 patients in the target areas not including those patients pending asthma activation from the DCHP member database:




Objective 1: Diabetes Telehealth

| Yr 2 Target | Yr 2 Q1 Actual | Variance | Actions | Impact | Revisions |
|---|---|---|---|---|---|
| 60 kids | At least 50 | none | Need more baseline data | Creates greater emphasis on system automation than planned | Healthimo is spending a significant amount of time developing tools for automating system reporting. Also piloting new methods of remote HEDIS data capture. |
| 400 adults | At least 900 | none | Need more baseline data | Creates greater emphasis on system automation than planned | Healthimo is spending a significant amount of time developing tools for automating system reporting. Also piloting new methods of remote HEDIS data capture. |

As compared to the goal of actively supporting 60 children and 400 adults with diabetes the Network is well-positioned to exceed plan. Currently not satisfied with the level of hard data but we are confident in our new strategy for identification of high risk members and focus on home diagnostics plus kiosk referrals resulting in a combination of laboratory and self-reported data. Counts of patients with baseline data from Yr1 Q4 are shown below:

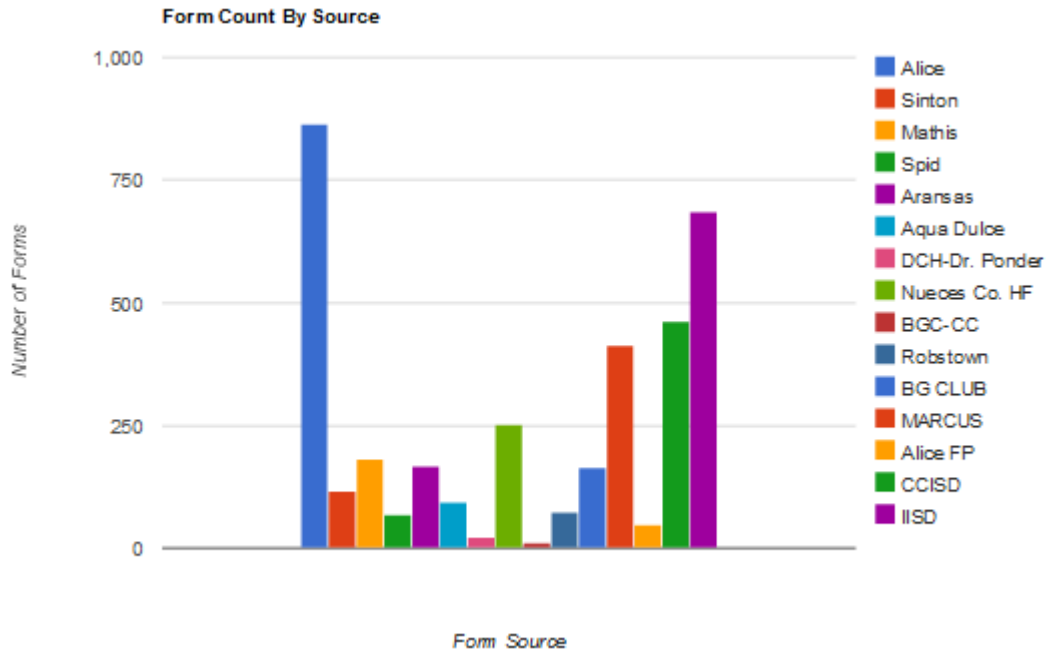



Objective 2: Asthma Telehealth

| Yr 2 Target | Yr 2 Q1 Actual | Variance | Actions | Impact | Revisions |
|---|---|---|---|---|---|
| 100 kids | More than 12,000 | none | Need more baseline data | Creates greater emphasis on system automation than originally planned. Additional time spent planning and database development. | Healthimo is spending a significant amount of time developing tools for automating system reporting. Also piloting new methods of remote HEDIS data capture. |

Objective 3: Community Outreach

| Yr 2 Target | Yr 2 Q1 Actual | Variance | Actions | Impact | Revisions |
|---|---|---|---|---|---|
| 9 sites | 15 known sites | yes | Refocus efforts away from clinic-based recruiting | Expected to generate cost savings in year 3 | None. |




Objective 4: Sustainability

| Yr 2 Target | Yr 2 Q1 Actual | Variance | Actions | Impact | Revisions |
|---|---|---|---|---|---|
| -- | -- | Significantly lower per patient cost vs. plan | None | Due to system automation and low support requirements more patients can be served at very low marginal cost. | Aggregate data sources for future enrollments will become key strategy for sustainability. |

# Network Parters:

There are currently nine active participating network sites. Based on last year's challenges associated with the partnering sites level of commitment and the duplicate patient volumes it was necessary to partner with other clinics located within the same geographic location of the original partners. The Outreach Coordinator delivered the same "tool kits" to each site location which included registration forms, clip boards, and signage, etc.

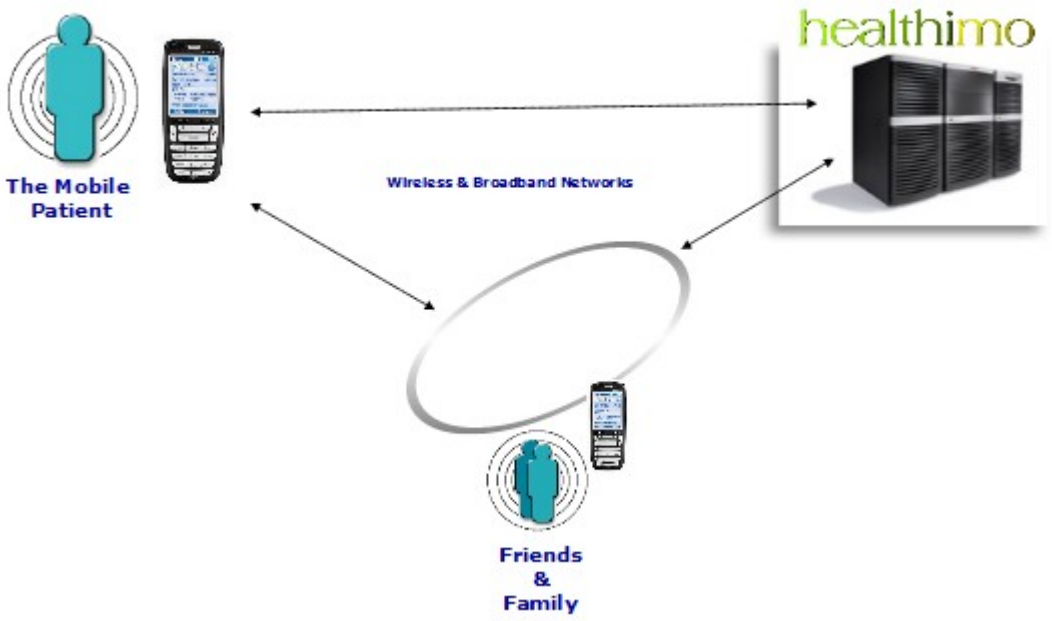
Due to the unanticipated high volumes of enrolled members receiving health interventions via electronic deliver to their home, office and/or mobile phones, the emphasis clearly must move to better identification of patient home location including improved accuracy of Rural vs. Urban as a profile type. There is also a significant effort to automate the reporting given the high volumes of enrollees. At this time, more than 50% of enrollees are estimated to reside in a rural zip code.

The team is working to identify zip codes in the service area and making a determination of rural vs urban. While some members are enrolled including home zip code, others enroll with only their mobile phone#. The first six digits of the phone # (NPA-NXX) provide an approximation of their home location especially when we cross-reference the NPA-NXX for patients without a home zip code to those patients with known home zip code and NPA-NXX. While not 100% accurate we believe this is the best approach until such

time when we can acquire the home zip code via a profile data request return reply message from the patient's mobile phone.

# Protocols:

General educational messaging and diabetes specific messaging continue to focus on behavioral change in efforts to produce better health related outcomes for the overall general population of person with or without diabetes. These messages are delivered to the general population on an average of 3 times per week. Healthimo designs these educational messages using recognized expert sources as the standard.




New for year 2 is the asthma protocol which has been carefully designed with input from several children's hospitals and asthma experts. During an intial pilot of the asthma education module we learned that 10 of 10 patients were highly satisfied with the 4 month intervention and they required virtually no help in learning or using the technology. The asthma protocol was designed, documented and localized during Q1 with the bulk of work on the asthma protocol limited to database exports and joins from multiple Driscoll Children's Health Plan (DCHP) data sources and local content development.

# System Design:

DCHP, working closely with healthimo jointly arrived at a strategy to pull data from multiple systems in support of a strategy to enroll large numbers of children with diagnosed asthma. Almost 12,000 children have been identified from over 9,000 homes in the service area. The data is scheduled for secure file transfer on a monthly basis to update and enroll all new members as well as for tracking those members who lose their Medicaid benefit for various reasons. The asthma protocol provides a unique opportunity to measure incidence of ED utilization when patients lose their health benefits; data which is otherwise not available to the traditional healthcare system.

# Projected Performance – Next 3 Months:

The following project tasks, dates and status are shared for the review team to provide insight into the next 3 months of the project.


We are anticipating a significant increase in the quantity of HEDIS metrics captured by the Network in Q2. A new strategy developed in Q1 is to utilize CLIA approved home blood sample collection kits as a mechanism to assess blood glucose (HbA1c) and cholesterol (LDL) levels. Likewise, we intend to promote use of blood pressure kiosks commonly found at retail pharmacies and grocery stores by request. A pilot of this new intervention was initiated at the end of Q1 resulting in 13 patients with various relationships to diabetes including a high likelihood of undiagnosed and unmanaged diabetes. Lab data and self-reported blood pressure data will be assessed during Q2. Patients with elevated levels will be referred to their local health clinic and followed to understand if the patient actually attends the visit and begins to perform self-care under the guidance of a physician. We anticipate this process can be highly optimized and depending on the frequency of undiagnosed and unmanaged diabetes identified as well as those cases we are able to engage in care will represent a significant impact on improving access to care for patients living in the rural area.

# Other

**State Activities:** Of special note are House Bill 70 and Senate Bill 293 which seek to enact funded legislative mandates in support of telemedicine style services for its Medicaid members. There is a very good chance that this legislation could pass and be in full effect by September 1, 2011.

**Collaborative Communications:** In addition to the project management tool described previously, the OAT team is anticipating use of a secure webinar platform that supports multi-user video conferencing and other tools including online file sharing. Testing of the platform and regular use are expected to occur beginning February 2011. A snapshot of the environment follows: