



2012 ANNUAL EVALUATION REPORT

*St. Joseph Health Systems/ Kentucky
Health One*

December 2013

Corporation for
NATIONAL &
COMMUNITY
SERVICE 

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[Acknowledgements](#)

This report was developed under grant #10SIHKY001

**Kentucky Healthy Futures Initiative
Social Innovation Fund
2012 Annual Report for Saint Joseph Health System:
Virtual Primary Care Delivery**

I. Introduction

Kentucky is faced with significant challenges: high poverty, low health status, geographic barriers especially in eastern Appalachian counties, shortage of physicians and other allied health professionals, and a high number of uninsured citizens.

Beginning in 2008, to understand the scope of unmet needs in Appalachia, Saint Joseph Health Systems (SJHS) reviewed population and health service data available from delivery of care through the Eastern KY Mobile Health Service (EKYMHS), Saint Joseph Mt. Sterling and the Bath County Rural Health Clinic, as well as secondary data available through State Health Rank, United States Census and the Kentucky Institute of Medicine. This assessment indicated that within SJHS' service area, the need was greatest in Wolfe and Powell Counties. The Kentucky Institute of Medicine Report (2007)¹, ranked Wolfe County last and Powell County as 112 out of the 120 Kentucky counties in overall health status; Kentucky ranked 44th in overall state health status in 2012.² Additionally, in these locales the need for safety net services is significant. Both counties have a higher percentage of residents with income below the federal poverty level and without health insurance, lower primary care provider to population ratio than the state averages and limited access to primary and specialty care services. Within these two counties, chronic disease rates specifically cardiovascular deaths, cancer deaths, premature deaths and total mortality, exceeded state averages.

To address these health issues SJHS applied for a 2010-2012 Foundation for a Healthy Kentucky grant *Community Based Delivery Model: Virtual Care*. The main goal was to increase access to primary and specialty care services by establishing two fixed-site primary care clinics, in Clay City/Powell County and Campton/Wolfe County. The clinics would be managed by Advanced Practice Registered Nurses (APRN) and virtually linked to physician specialists in Lexington and Mt. Sterling via telehealth technologies. With collaboration from Kentucky River Community Care (KRCC), the clinic in Campton was developed as an integrated physical/behavioral health model.

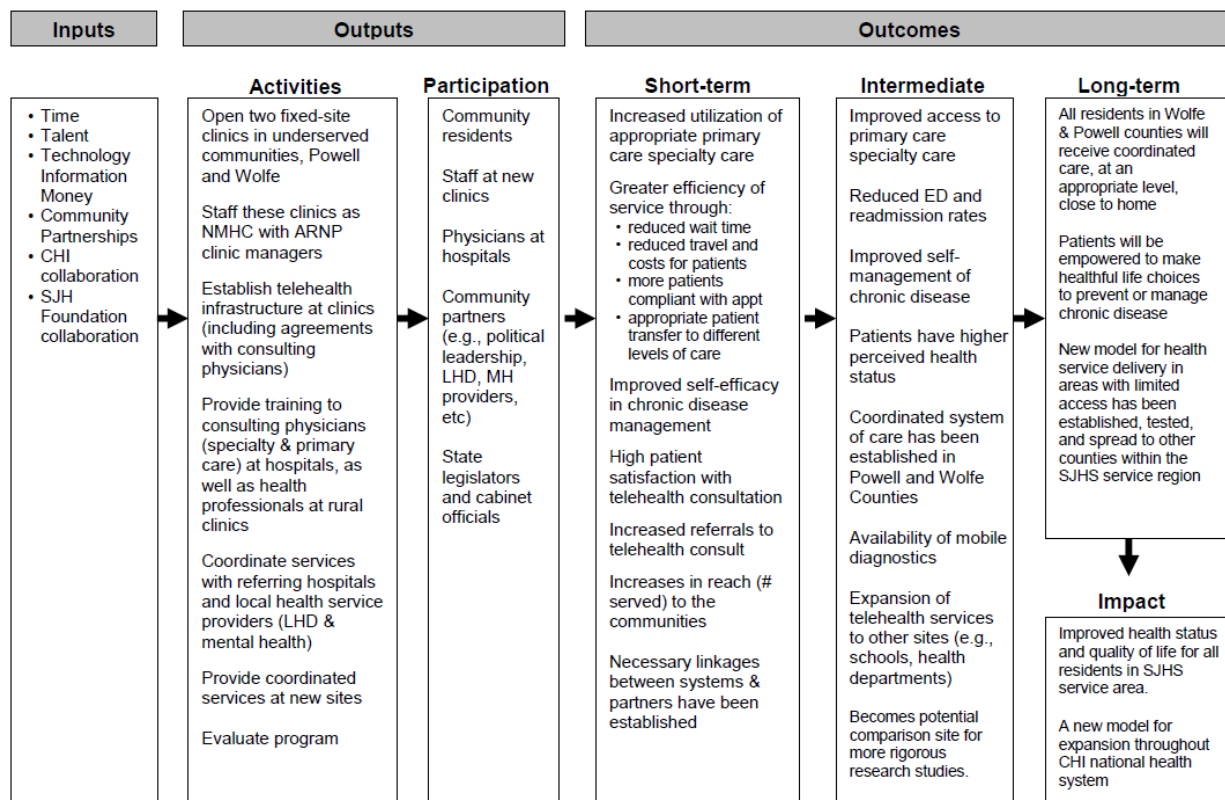
By developing fixed clinic sites in Wolfe and Powell counties, SJHS's intent was to create a portal where individuals could have consistent availability for primary and specialty care without duplicating existing services. To ensure effective integration and coordination of services in Powell and Wolfe counties, SJHS worked with local legislative and governing representatives, the local health departments and mental health providers in the communities.

¹ Kentucky Institute of Medicine. *The Health of Kentucky: A County Assessment*. Lexington, KY, 2007. <<http://www.kyiom.org/healthky2007a.pdf>>..

² United Health Foundation. *America's Health Rankings*, 2012. <http://www.americashealthrankings.org/KY>.

Program Logic Model

The KHFI grant allowed SJHS to establish and test this new community-based model for health service delivery. In a third year continuation grant it plans to expand it to other Kentucky counties within its service area. Below is the logic model that was developed to describe the Community Based Health Delivery Model (CBHDM) and the associated outcomes.



II. Methods

The purpose of this evaluation was to provide program staff and funders information about the implementation of these two rural clinics and provide preliminary evidence of program impact by documenting program outputs and outcomes. The research design called for longitudinal data collection on patient outcomes.

Our research study design is intended to provide preliminary levels of evidence as outlines in the guidance provided on behalf of the Corporation for National and Community Service's Social Innovation Fund. Preliminary evaluation questions include:

1. Who are the patients visiting the new clinics and obtaining specialty care services and what segments or portions of the county population are accessing services?
2. To what extent has the new model improved primary and specialty care utilization and access?

3. To what extent do patients perceive improvements in their overall health as a result of receiving services through the CBHDM?
4. To what extent are patients with chronic disease better able to self-manage their conditions?
5. To what extent are patients and providers satisfied with telehealth consults as a way to access specialty care?
6. What are lessons learned from the implementation of this project that could be used to reduce barriers for future research, and produce more moderate or stronger levels of evidence in study design and evaluation?

A. Data Collection

The data collection efforts focused on answering the questions posed above regarding: reach and demographics of patients, utilization and access, health improvements, chronic disease management and satisfaction with telehealth consults.

To collect information on patient demographics and utilization, data collection plans called for the use of both the clinic systems electronic medical record (EMR), AllScripts, and self-administered patient surveys completed during clinical contacts. The design allowed for the substitute collection of clinical service and patient demographic information from AllScripts collected during the patient registration process. The EMR contains information on gender, age and insurance coverage/payment type. Study forms included demographic information on age, race, ethnicity, and preferred language. The only demographic category covered by both AllScripts and the study forms was age. This manner of reporting using AllScripts, was initiated to provide quarterly data during a time when data from study forms could not be obtained, because study forms had not received human subjects' approval from our contracted Institutional Review Board, Western IRB, in Olympia, Washington. After six quarters of reporting in this manner, the program continues to use AllScripts data along with data from study forms to maintain data consistency.

To provide as much demographic data as possible, the program was forced to report some data on the entire population of patients (reach, service delivery, some demographics available in the AllScripts record, and other data on a much smaller patient population who consented to participate in the evaluation process. The initial IRB approval required the protection of study participants' anonymity, and given the protocols in place, it was not possible in this first year to aggregate AllScripts and study form data for the patients who participated as planned, and we need to discuss these two groups separately. Study protocol and study participant identification changes have been sent to the IRB for review and approved so that in the future, we can link data from the two different data sources, the EMR and study protocols

Data collection on other areas of interest included:

- Patient survey at every visit
- Telemedicine referring/consulting provider survey
- Telemedicine patient survey

- Review of program documents

B. Patient recruitment

To comply with IRB requirements, patients were recruited and consented to participate in the study. Study protocols received IRB approval on May 15, 2012 after a lengthy application and approval process. Patient Services began in Powell County in July 2011. Wolfe County clinic opened in August 2012 and began study recruitment immediately.

During 2012, a total of 151 (of a patient base of 687) study participants were recruited. Powell County recruited 99 unique patients. Wolfe County recruited 52 study participants. The study protocol required participants to be recruited at the initial patient visit to the clinic. Data verification identified non-compliance with the study protocol regarding patient recruitment. Patients were being recruited at follow-up visits if they declined participation during their initial visit. Thus, recruitment percentages cannot be calculated for 2012. Additionally, due to a communication error no data were collected and no study participants were recruited for six weeks of fourth quarter. It is believed this reduced the number of study participants recruited for that quarter. Total study participants for 2012 are lower than expected due to these problems. Study protocols have been revisited and these problems corrected for 2013 data collection.

C. Data analysis

Data analysis was performed in SPSS. For categorical characteristics, descriptive statistics such as frequencies and percentages were calculated. For continuous characteristics, means, medians, standard deviations and ranges were used. Longitudinal plots were used to graph overall efficacy for each patient over time.

D. IRB Review and Compliance

We used the Western Institution Review Board (WIRB), Olympia, WA, as our IRB for this study. The Principal Investigator, Evaluator, Research Assistant, APRNs and Office Coordinators for Saint Joseph Primary Care Clinic – Clay City (Powell County) and Campton (Wolfe County) completed Human Subjects Protection training.

All study instruments are stored in a secure and locked location.

Our APRNs, LPNs, office staff, social worker and research assistant have completed statewide criminal background checks, FBI fingerprint check and National Sex Offender checks. The LPN at Campton had to redo the fingerprint check because of an ink smudge and we are awaiting the FBI clearance letter.

III. Results

A. Reach

In 2012, there were 687 unduplicated patients seen in all clinic locations. Powell County was operational for all 12 months of 2012 and received a total of 562 unique patient visits and 1182 total visits. Wolfe County clinic opened in August, and saw patients for 5 months of the data collection period covered by this report. Wolfe County reported 141 unique patients in 395 visits. Sixteen patients were seen in both clinics, thus the total unduplicated patients for all clinics is 687. **Table 1** provides reach information from patients seen in both clinics combined.

Table 1. Clinic Reach

Indicator	Powell	Wolfe	All
Total number of patients reached	562	141	687
Total number of patient visits	1182	395	1577
Number of telemedicine consults completed	2	1	3
Number of study participants enrolled	99	52	151
Number of study participants with disease of interest (CHF, COPD, Pneumonia, CAD, Diabetes, AMI or Cancer)	46	23	69
Number of study participants completing the chronic disease self-efficacy scale.	33	8	41

Implementation of telemedicine services was delayed through the end of 2012. Only a few telemedicine consults were held to test the system and equipment. The absence of telemedicine services significantly lowered the anticipated return patient visits that would have likely been for telemedicine consultations with specialty providers. We were not able to track our patients' follow-up or specialty care visits at other facilities in this evaluation.

As discussed above, the clinics enrolled 151 patients in the study. Of those, there were 69 that had chronic diseases of interest, which made them eligible to complete the chronic disease self-efficacy scale. 41 people completed the self-efficacy scale—59% of those who were eligible to take it.

All attained year-to-date reach numbers are below anticipated projected year values. At the Powell County Clinic, health issues from the APRN affected number of patients seen at the clinic for second quarter. The Wolfe County Clinic didn't open until August, which gives only 5 months of data for 2012. As stated above, all/returning patient visits were significantly lower than anticipated due to telemedicine delays, which was anticipated to lead to a number of follow-up appointments. Based on the steady growth experienced by the clinics, and the steady growth seen in the other clinic, it is reasonable to assume that the projected values would have either been attained or much closer had the telemedicine program gotten started and the Wolfe County Clinic had opened sooner.

In regards to recruiting study participants, the IRB had not approved study forms until end of second quarter, thus study data was not able to be attained until start of third quarter. Additionally, in the Powell County Clinic, six weeks of data was not collected due to a communication error with clinic staff.

Clinic staff has been retrained in study protocols to prevent data collection errors going forward. Additionally, recruitment methods were addressed to assist in increasing participation. Some modifications were made to the study forms by reducing the number of questions in the surveys. Additionally, the Chronic Disease Self-Efficacy scale was reduced from 32 to 6 questions. These changes have been submitted to IRB for review. Until IRB approval is attained current study forms will continue being utilized for data collection.

B. Patient Demographics

1. Age, Gender and Income - All patients (n=687)

Table 2. Age, Gender, and Income of Patients – Both Clinics

Reporting Period: January 1 - December 31, 2012

Variable	Response options	Patients	Distribution	All Visits	Distribution - All Visits	Visits/ person
Gender	Male	317	46.1%	708	44.9%	2.2
	Female	370	53.9%	869	55.1%	2.3
	Total	687	100.0%	1577	100.0%	
Age	< 5 years	22	3.2%	42	2.7%	1.7
	5 - 18 years	55	8.0%	128	8.1%	2.3
	19 - 39 years	208	30.3%	391	24.8%	1.9
	40 - 64 years	324	47.2%	808	51.2%	2.5
	65+ years	78	11.4%	208	13.2%	2.7
	Total	687	100.0%	1577	100.0%	
Insurance/ Payment Type	Private Insurance	183	26.6%	372	23.6%	2.0
	Medicaid	127	18.5%	284	18.0%	2.2
	Medicare	125	18.2%	377	23.9%	3.0
	Self-pay (no insurance)	252	36.7%	544	34.5%	2.2
	Total	687	100.0%	1577	100.0%	

Table 3. Age, Gender and Income of Patients – Individual Clinics

Reporting Period: January 1 - December 31, 2012

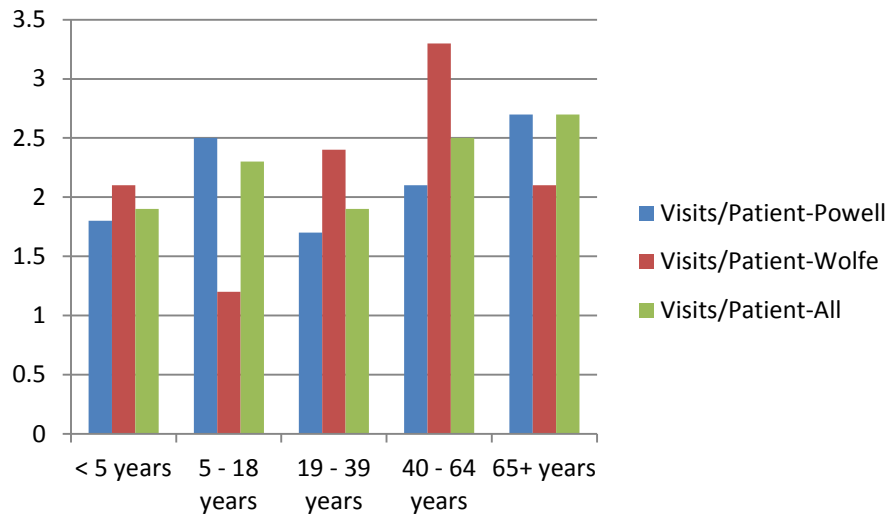
		Patients Powell	Clinic Visits Powell	Visits/ period	Patients Wolfe	Clinic Visits Wolfe	Visits/ period
Gender	Male	259	522	2.0	66	186	2.8
	Female	303	660	2.2	75	209	2.8
	Total	562	1182	NA	141	395	NA
Age	< 5 years	15	27	1.8	7	15	2.1
	5 - 18 years	47	118	2.5	8	10	1.2
	19 - 39 years	166	288	1.7	42	103	2.4
	40 - 64 years	264	560	2.1	75	248	3.3
	65+ years	70	189	2.7	9	19	2.1
	Total	562	1182	NA	141	395	NA
Paym ent Type	Private Insurance*	165	338	2.0	18	34	1.9
	Medicaid	99	208	2.1	28	76	2.7

	Medicare	106	295	2.8	22	82	3.7
	Self-pay (none)*	192	341	1.8	73	203	2.8
	Total	562	1182	NA	141	395	NA

The patient base at the clinics consists of slightly more female than male patients which is not significantly different from the gender distribution in the two counties. Of the 687 patients, 317 (46.1%) were male and 370 (53.9%) were female. However, women are more likely to have multiple clinic visits in the reporting period. Of the 1577 clinic visits, 708 were male and 869 were female (2.3 visits for women and 2.2 visits for men over the period). Females were significantly more likely to have returned for multiple visits over the year. In every quarter for all clinics there are more female patients than male patients, showing this is a stable pattern within the gender demographics.

The adult population aged 19-64 included 76.0% of all visits. Children, birth to 18 years, represent 10.8% and elderly, 65 years or older, represent 13.2% of all visits. These percentages are stable across each quarter and each clinic, representing a stable pattern of age demographics. Figure 1 shows the distribution of visits/patient by age for the Powell Clinic, Wolfe Clinic, and combined. We can conclude that across both clinics, adults aged 19-64 are the predominant age demographic of our patient base and that as age increases patients are more likely to return to the clinic for multiple visits throughout the year with the exception of the 19-39 year age group, which is less likely to return for multiple visits.

Figure 1: Patient Visits by Age

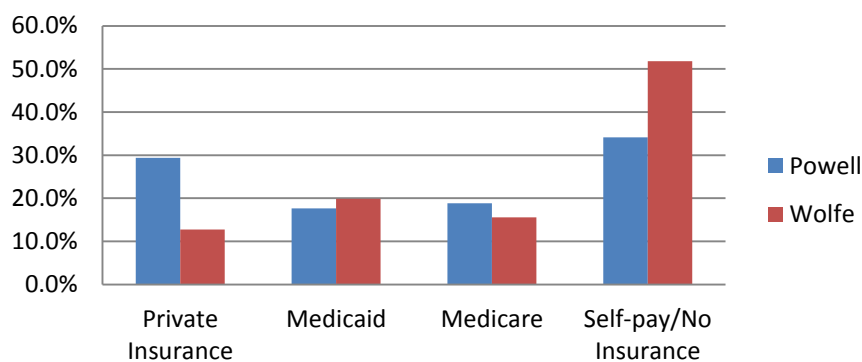


The insurance/payment type category was limited to the primary insurance for each patient. Cases with no insurance coverage were classified as self-pay. Overall, 36.7% of patients are Self-pay/uninsured, 36.7% have Medicaid or Medicare, and 26.6% have private

insurance. These percentages fluctuated slightly per quarter and per clinic. Looking at “all visits” shows that patients with Medicare are more likely to return for multiple visits in a year while those with other insurance types are slightly less likely to have multiple visits.

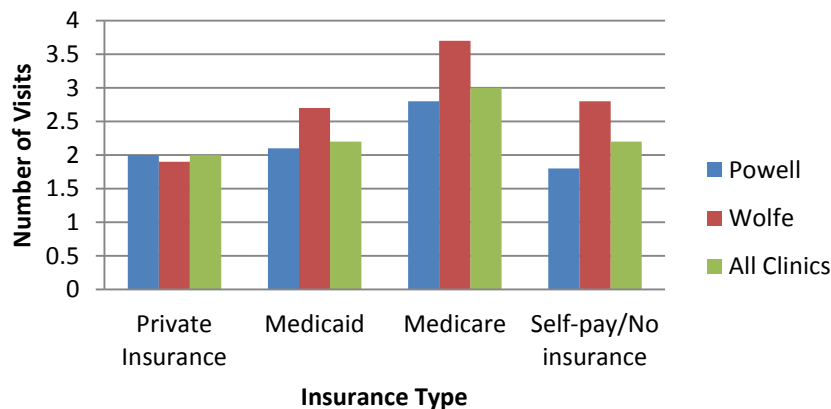
Combining all clinic insurance and payment type can mask the differences in specific counties. As shown in Figure 2, there are differences in payment type between the two clinics. Wolfe County has significantly lower private insurance and significantly higher self-pay/no insurance compared to Powell County. While 52% of the patient base in Wolfe County is uninsured, in Powell County it is 34%. The differences between areas served are important to identify to determine areas of program service enhancement, growth and improvements.

Figure 2: Insurance type by Clinic



Different types of insurance relate to differences in patient visits at the clinic level, even with low-barriers and low-cost. The Medicare population is either disabled or over the age of 65, making it the oldest, and in this region also the most burdened with disease. Those patients with Medicare averaged three visits to a clinic in the period, the most of any group, with Medicare patients in Wolfe County having the most visits overall, on average 3.7 visits. In fact, with the exception of Wolfe County patients with insurance, the patients in the Wolfe Clinic had more visits than patients of the Powell County clinic regardless of insurance/payment type.

Figure 3: Visit Frequency by Insurance Type



1. Additional Demographics – Study participants (n=151)

Table 4, below, provides demographic information for both clinics from patients who agreed to participate in the evaluation process (n=151) for patients and visits. As previously mentioned, these patients are a subset of the clinic population, but for them self-reported race, ethnicity, language, education level, and number living in the home was collected. Table 3 offers counts and distributions of patients by demographic categories not available through the EMR or available clinic records. These individuals cannot be matched to themselves in the population-level tables.

Table 4. Additional Demographics for Study Participants

Variable	Response options	Patients	Distribution Patients	Patient Visits	Distribution Patient Visits
Age	< 5 years	3	2.0%	3	1.4%
	5 - 18 years	10	6.6%	12	5.6%
	19 - 39 years	42	27.8%	54	25.2%
	40 - 64 years	82	54.3%	127	59.3%
	65+ years	13	8.6%	16	7.5%
	Missing	1	0.7%	2	0.9%
	Total	151	100.0%	214	100.0%
Race	White/Caucasian	143	94.7%	205	95.8%
	Black/African-American	0	0.0%	0	0.0%
	Native American/Hawaiian/API	2	1.3%	2	0.9%
	Mixed race (biracial, etc.)	1	0.7%	1	0.5%
	Other	4	2.6%	4	1.9%
	Missing	1	0.7%	2	0.9%
	Total	151	100.0%	214	100.0%
Ethn.	Hispanic	3	2.0%	3	1.4%
	Non-Hispanic	148	98.0%	211	98.6%
	Missing	0	0.0%	0	0.0%
	Total	151	100.0%	214	100.0%
Language	English	148	98.0%	210	98.1%
	Spanish	0	0.0%	0	0.0%
	Other	1	0.7%	1	0.5%
	Missing	2	1.3%	3	1.4%
	Total	151	100.0%	214	100.0%
Income per Year	Less than \$10,000	75	49.7%	115	53.7%
	\$10,000 - \$10,999	8	5.3%	13	6.1%
	\$11,000 - \$20,999	25	16.6%	36	16.8%
	\$21,000 - \$30,999	13	8.6%	15	7.0%
	\$31,000 - \$40,999	11	7.3%	13	6.1%
	Over \$41,000	12	7.9%	13	6.1%
	Missing	7	4.6%	9	4.2%
	Total	151	100.0%	214	100.0%
Education	Finished Elementary School	38	25.2%	48	22.4%
	Finished High School	88	58.3%	132	61.7%
	Finished College	11	7.3%	11	5.1%
	Finished Graduate School	5	3.3%	6	2.8%
	Finished Vo-Tech School	7	4.6%	14	6.5%
	Missing	2	1.3%	3	1.4%
	Total	151	100.0%	214	100.0%
Employment	Work Full-Time Now	40	26.5%	52	24.3%
	Not Working Full-Time Now	42	27.8%	52	24.3%
	Disabled and Cannot Work	49	32.5%	82	38.3%
	Retired	11	7.3%	13	6.1%

	Work Part-Time Now	7	4.6%	11	5.1%
	Missing	2	1.3%	4	1.9%
	Total	151	100.0%	214	100.0%
# Living at Home	Only 1 Person	29	19.2%	49	22.9%
	2 People	57	37.7%	86	40.2%
	3 People	31	20.5%	37	17.3%
	4 People	19	12.6%	23	10.7%
	5 People	6	4.0%	6	2.8%
	6 or More People	8	5.3%	10	4.7%
	Missing	1	0.7%	2	0.9%
	Total	151	100.0%	214	100.0%

The one variable that was collected for both groups was age. Among the study participants, the adult population aged 19-39 includes 27.8% of participants (N=42) compared to 30.3% in the entire patient base aged 19-39 (N=208). Among the study participants, the adult population aged 40-64 includes 54.3% of unique participants (N=82) compared to 47.2% in the entire patient base aged 40-64 (N=324). Children, birth to 18 years, represent 8.6% of study participants (N=13) and 11.2% of the entire patient base (N=77). Elderly, 65 years or older, represent 8.6% of study participants (N=13) and 11.4% of the entire patient base (N=78).

These data were subject to a comparison of proportions test to determine if the two groups were comparable based on age. In those cases where there was sufficient data for the test, the difference in the proportions of 19-39 and 40-64 year olds groups in both samples are not statistically different at a 95% level. The other age categories do not contain enough people to calculate the significance of their proportional differences. Though not identical, this is reflecting acceptable representation from these age ranges in the proportions they are found in the patient base.

Race was self-identified by study participants. There is no statistically significant difference between study participant base and those returning for multiple study visits. Approximately 95% participants identified as White/Caucasian and 5% identified from another race group in rates similar to the racial distribution in of the counties themselves. The US Census lists the White/Caucasian percentage as 98.0% for Powell County and 99.0% for Wolfe County. Therefore, the percentage of patients' races is representative of the counties served.

Ethnicity was self-identified by study participants: 3 Hispanic (2.0%) and 148 Non-Hispanic (98.0%). Total study visits include: 3 Hispanic (1.4%) and 211 Non-Hispanic (98.6%). The U.S. Census reports Hispanic ethnicity as 1.1% in Powell County and 0.5% in Wolfe County. Therefore, the low percentages of 2.0% Hispanic patients in the study base and 1.4% returning study visits are representative of the counties served.

Preferred language was self-identified by study participants. 98% of patients reported speaking English as their preferred language. Total study visits also were about 98% in English. The U.S. Census reports language other than English spoken at home as 1.1% in Powell County and 0.3% in Wolfe County. Therefore, the high percentage of 98% English speaking patients for the study and all study visits is representative of the counties served. There is no significant statistical difference between the study base and all study visits.

Income was self-reported by study participants. About half of study participants (49.7%) and a slight majority (53.7%) of the study visits were among patients reporting an income of “less than \$10,000/year.” In fact, patients and visits in this income group exceeded all other categories combined excluding the missing responses. Participants in the three lowest income categories (Income < \$21,000/year) are slightly more likely to have multiple study visits than the three upper income categories (Income >= \$21,000/year). This is an indication that some of the poorest residents in the county are seeking care at this clinic. However, it should be noted that the survey question did not specify whether “income” was defined as household income or individual income, so the results are somewhat ambiguous.

Education was self-reported by study participants. In the base study population more participants only finished elementary school (25.2%) than all participants who had attained any college, graduate or Vo-Tech education past high school (15.2%) excluding missing responses. The study base population identified 83.5% with high school education or less. Study participants who finished high school or Vo-Tech school were slightly more likely to return for multiple study visits than all other categories.

Employment was self-reported by study participants. Roughly a third of the study base reports they are disabled (32.5%). Slightly over a quarter of the study base is not working full-time or is unemployed now (27.8%). Participants in all employment categories are slightly less likely to return for study visits except for the disabled and cannot work category.

1. Location of Patients – All patients

Figure 4 provides zip code information from unique patients seen in both clinics. The all visits category can give a rough estimate when compared to the patient base to identify which zip codes are generating returning patients and those utilizing the clinics most frequently.

One of our goals in this evaluation was to determine where our patients lived to understand distance to access to primary and specialty care. Although these clinics are at present only able to provide primary care, we collected baseline zip code data on all our patients. Zip code data was collected during the registration process in AllScripts.

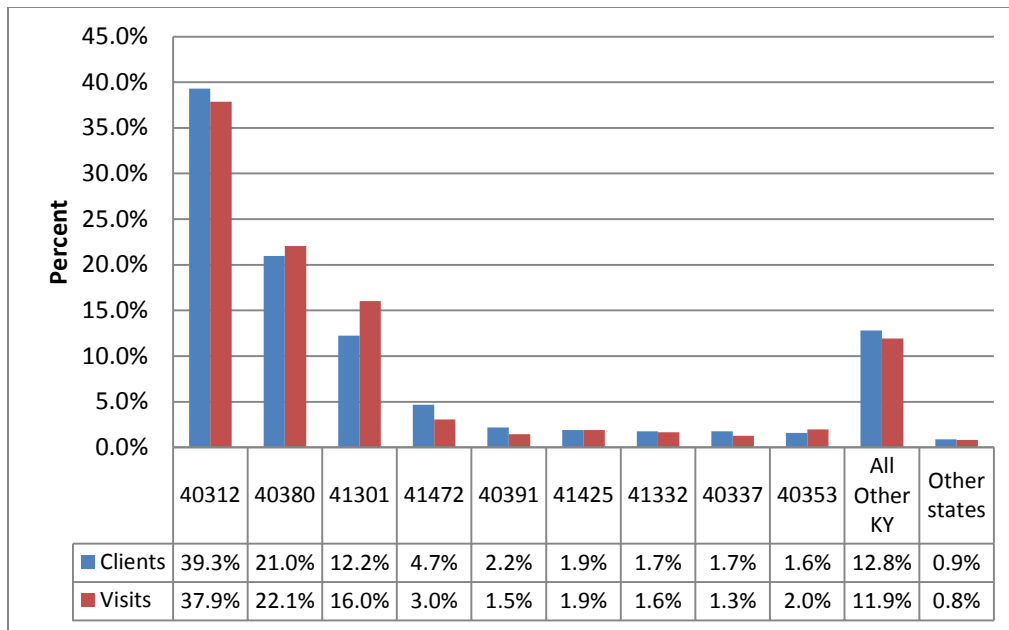
Overall, patients utilizing the clinics came from 43 different Kentucky zip codes³. Only 6 patients came from outside Kentucky. A majority (60.3%, n= 414) of both clinics’ patients reside in two Powell County zip codes (40312 and 40380⁴). An additional 12% (n=84) reside in 41301 (Campton) which is largely in Wolfe County.⁵ The only other zip code with more than 3% of patients was 41472, West Liberty, in Morgan County. For all visits the same three zip codes were the most common.

³ In Kentucky, zip codes are not limited to a single county and a single county can have multiple zip codes

⁴ In addition to Powell county, 40380 also includes parts of Estill County

⁵ Also includes parts of Morgan and Powell Counties.

Figure 4: Patients & Clinic Visits by Zip Code



Kentucky counties were assessed for recurring clinic visits to see where patients were traveling from the most frequently. See Table 5.

Table 5: Counties with Multiple Patient Visits

Counties with > 2 visits /patient	Counties with > 4 visits/patient
<ul style="list-style-type: none"> • Bath • Breathitt • Clark • Estill • Fayette • Franklin 	<ul style="list-style-type: none"> • Jackson • Lawrence • Morgan • Powell • Wolfe • Woodford

2. Disease status – study participants

Baseline data relating to disease status was defined as having or ever having had a diagnosis of seven conditions of interest: Congestive Heart Failure (CHF), Chronic Obstructive Pulmonary Disease (COPD), pneumonia, Coronary Artery Disease (CAD), diabetes (DM), Acute Myocardial Infarction (AMI) or any cancer. Each disease was calculated to determine what percentage of the study population reported each condition. It is important to remember that individuals can have more than one disease. Calculations were then made to identify total number of chronic diseases reported overall and number and percent of patients who reported any chronic disease.

Almost half (46%) of the study population reported having at least one disease (see Table 6; of those 69 individuals, they reported 113 total diseases. The most common diseases

reported were pneumonia (21%), diabetes (18%), and COPD (11%). Multiple study visits were more likely among CHF, Pneumonia, COPD, CAD and AMI patients and less likely for cancer patients. Overall, among study participants, those with these illnesses did not have any more frequent visits to the clinics than those who did not report illness. However, it is likely that the severity of disease in the sample is lower than the severity of illness among the total population with any disease, which may account for the parity in frequency.

Disease	Patients	% Patients	Visits	% of visits
CHF	11	7.3%	19	8.9%
COPD	17	11.3%	28	13.1%
Pneumonia	31	20.5%	49	22.9%
CAD	3	2.0%	8	3.7%
Diabetes	27	17.9%	37	17.3%
AMI	10	6.6%	18	8.4%
Cancer	14	9.3%	17	7.9%
Total # Chronic Disease Reports	113	N/A	176	N/A
# Patients ANY Chronic Disease Present	69	45.7%	98	45.8%

A. Access to Care & Medications

In the long-term, our goal is for all residents in Wolfe & Powell counties to have access to coordinated care, at an appropriate level, close to home. We have seen preliminary evidence of this in the stories we have provided in our quarterly reports. The examples illustrate how patients have access to primary care and the APRN directs that patient to the next level of care needed, whether it is an emergency room visit (and in some cases calling the ambulance to pick up the patient at the primary care clinic) or obtaining an in-person or telehealth specialty consultation for the patient. To quantitatively assess improvements in access to care, the evaluation looked at distance traveled to appointments and prior health care utilization. The evaluation also looked at access to needed medications.

1. Distance traveled

Distance travelled to care has been identified as a barrier to access. Distance travelled for each clinic was calculated by taking the actual street address (no post office boxes used for mailing addresses) of all patients and mapping the distance to the clinic they attended. All patients for two quarters were calculated and average distance travelled to each clinic by zip code was determined. These averages are considered “unadjusted” in Table 7. Average distance travelled per unique patient were 3.0 miles for Powell County (Clay City), 7.1 miles for Wolfe County (Campton) and all clinics combined averaged 5.1 miles. Average distance travelled per visit were 11.4 miles for Powell County (Clay City), 20.6 miles for Wolfe County (Campton) and all clinics combined averaged 16.0 miles.

Of note, several patients from Lexington and the surrounding cities “followed” the APRNs from previous employment to Powell and Wolfe Counties. These patients raised the average for distance travelled significantly. Removing these patients from the average reduces the average distance travelled as follows: Powell County unique patient from 3.0 to 1.8 miles, Powell County per visit from 11.4 to 9.4, Wolfe County unique patient from 7.1 to 3.8 miles,

Wolfe County per visit from 20.6 to 11.6, All clinics combined averages change per unique patient from 5.1 to 2.8 and per visit from 16.0 to 10.5. These patients report addresses for other states, Tennessee, or distant counties in Kentucky and these patients would not normally be utilizing these clinics. At this time, no adjustments can be made for individual patients attaining care at the clinics who are temporarily in the area due to “following” their provider or while visiting the area where clinics are located.

Table 7: Distance Traveled

Reporting Period: January 1 - December 31, 2012

	Program area	Unadjusted average distance travelled per unique patient	Adjusted average distance travelled per unique patient	Unadjusted average distance travelled per visit	Adjusted average distance travelled per visit	Year to date miles travelled for all visits	Year to date estimated travel cost (\$0.55 per mile) for all visits
Access - Travel and Cost	Powell County (Clay City)	3.0	1.8	11.4	9.4	13483.2	\$7,415.76
	Wolfe County (Campton)	7.1	3.8	20.6	11.6	8117.7	\$4,464.74
	All	5.1	2.8	16.0	10.5	21600.9	\$11,880.50

Average cost of travel was calculated for each clinic individually and an all clinics total. Travel was estimated at \$0.55 a mile. Miles travelled for each clinic was calculated by taking the average miles travelled per zip code and multiplying by number of patients reporting an actual street address (no post office boxes) for that zip code for all visits. Powell County (Clay City) year to date total for 2012 was 13,483.2 miles equating to \$7,415.76 in travel costs for patients. Wolfe County (Campton) year to date total for 2012 was 8,117.7 miles equating to \$4,464.74 in travel costs for patients. All clinics year to date total for 2012 was 21,600.9 miles equating to \$11,880.50 in travel costs for patients.

The intention of this outcome measure was to compare the distance to the primary care clinic for a telehealth consultation, to the distance that would have otherwise been traveled to a face-to-face visit to a specialist. This comparison would provide cost savings in mileage/transportation costs and time, as well as increased access to specialty care. Because of the delay in telemedicine implementation, this outcome measure only shows distance traveled/access to care to the primary care clinic.

2. Access to Specialty Care

Telemedicine implementation was delayed in all clinics through the end of 2012 due to equipment and connectivity issues. Increased bandwidth was needed to support telemedicine implementation, a process requiring extensive negotiations and new lines to be installed. The increase in bandwidth was necessary because of the unforeseen implementation of the AllScripts Medical Record, which utilized all of the bandwidth that had been planned for telemedicine consultations. Despite these delays each clinic had 1-2 telemedicine consultations to test the equipment and identify other potential issues. Changes were made in the equipment to facilitate better patient care. At the end of 2012, the telemedicine implementation was moving forward toward implementation. Distance traveled will become an important access marker once the telemedicine component is implemented. Travel to specialty providers from Powell and Wolfe counties currently involves a significant amount of travel that will be saved through utilizing the telemedicine capability of the local clinic.

Many of the other short-term outcomes which were identified in original SEP have not been evaluated because of delay in telemedicine implementation. These outcomes will be addressed in the 2013 Annual Report. They include:

- Increased utilization of appropriate specialty care;
- Greater efficiency of service through:
 - reduced wait time (compared with wait to see specialists face-to-face);
 - reduced travel and costs to specialists for patients;
 - greater patient compliance with appointments
 - appropriate patient transfer to different levels of care;

3. Prior Health Care Utilization

From this evaluation, we have realized that it is more difficult to obtain reduced emergency room visits and readmission rates, since patients can go to many different ERs and Hospitals, and unless they return to the primary care clinic, we are unable to obtain this information. We can only report a patient's self-report on number of times of ER visits and hospital readmissions at their first clinic visit, and any additional self-reported information at their returning primary care visits. **Table 8** provides data on self-reported health care utilization over the past 12 months.

The last doctor visit was utilized to determine length of time since the patient last visited a medical provider for primary care. Almost 70% of study participants reported seeing a doctor within the past 12 months. An additional 17% had seen a doctor within the last 24 months. There was a slightly higher likelihood a participant would have multiple visits if they had last seen a doctor in 0-1 months. One reason for this may be that patients with a chronic disease require more care than those patients who do not have a chronic disease.

Specialty care utilization was identified by asking how many times a patient had seen a specialist within the last 12 months. Roughly 40% of the study participants utilized specialty

providers within the last 12 months, with 10% having had 5 or more visits. Multiple study visits were less likely for participants who had not seen a specialist in the past 12 months.

Emergency care visits were identified by asking how many ER visits the patient had within the last 12 months. Roughly 41% of the study participants had utilized the emergency room within the last 12 months, with half of those people only having one visit.

Hospital admissions were identified by asking if the patient had an overnight hospital stay within the last 12 months. Roughly 20% of the study participants reported a hospital admission at least overnight within the last 12 months. Participants were more likely to have multiple clinic visits if they had one or more than 5 overnight hospital admissions within the last 12 months.

Table 8: Health Care Utilization – Study Participants

	Response options	Patients	Distribution patients	All Visits	Distribution Visits
Last Doctor Visit	0 - 1 Month	26	17.2%	41	19.2%
	1 - 3 Months	37	24.5%	50	23.4%
	4 - 6 Months	21	13.9%	29	13.6%
	7 - 11 Months	19	12.6%	27	12.6%
	12 - 24 Months	26	17.2%	37	17.3%
	More than 36 Months	17	11.3%	22	10.3%
	Missing	5	3.3%	8	3.7%
	Total	151	100.0%	214	100.0%
Specialist Visit within 12 months	No Visits (0 Times)	88	58.3%	114	53.3%
	1 Visit	16	10.6%	25	11.7%
	2 Visits	14	9.3%	18	8.4%
	3 Visits	9	6.0%	14	6.5%
	4 Visits	5	3.3%	9	4.2%
	5 or More Visits	15	9.9%	23	10.7%
	Missing	4	2.6%	11	5.1%
	Total	151	100.0%	214	100.0%
ER Visits within 12 months	No Visits (0 Times)	79	52.3%	108	50.5%
	1 Visit	35	23.2%	42	19.6%
	2 Visits	19	12.6%	29	13.6%
	3 Visits	7	4.6%	12	5.6%
	4 Visits	6	4.0%	7	3.3%
	5 or More Visits	2	1.3%	5	2.3%
	Missing	3	2.0%	11	5.1%
	Total	151	100.0%	214	100.0%
Overnight hospital stay within 12 months	No Visits (0 Times)	120	79.5%	162	75.7%
	1 Visit	20	13.2%	30	14.0%
	2 Visits	6	4.0%	8	3.7%
	3 Visits	0	0.0%	0	0.0%
	4 Visits	0	0.0%	0	0.0%
	5 or More Visits	1	0.7%	3	1.4%
	Missing	4	2.6%	10	4.7%
	Total	151	100.0%	214	100.0%

It will be useful, in 2013, to compare study participants on all health care utilization questions to see if the number of overnight hospital admissions, emergency room visits, and length of time since having seen a physician for primary care decreases as patients have increased access to primary care. The data collected in 2012 from these study participants have established a baseline for comparison in future year end reporting.

4. Access to Medication

The Social Worker rotated between the two primary care clinics beginning 3rd Quarter 2012, and helped patients at Powell and Wolfe county clinics complete paperwork and obtain medications they need. Table 9 shows the reach of the Social Worker and the assistance provided to obtain medications.

The Social Worker assisted 9 (38%) more patients at SJPCC-Campton in the 4th quarter than the previous, and was able to double the drug assistance orders to help patients receive the medications that they need, which was estimated to be a 79% increase in value for cost of drugs provided.

The Social Worker assisted 19 (20%) more patients at SJPCC-Clay City in the 4th quarter than the previous, and processed 5% more drug assistance orders to help patients receive the medications that they need.

The Social Worker also helped 50 patients in Campton and 55 patients in Clay City obtain Financial Assistance during the 2012 4th quarter.

Table 9. Social Worker Assistance for Obtaining Medications

Clinic	3 rd Quarter number of patients	4 th Quarter number of patients	3 rd Quarter Number of Drug Assistance Orders	4 th Quarter Number of Drug Assistance Orders	3 rd Quarter AWP Value	4 th Quarter AWP Value
Campton (opened in 3 rd Quarter/2012)	24 ⁶	33	82	164	\$ 52,022	\$ 93,078
Clay City (7/1-12/31/2012)	95	114	321	337	\$197,386	\$197,582
TOTAL	119	147	403	501	\$249,408	\$290,660

B. Health Improvement

Health outcomes were calculated by asking study participants to self-report their overall health status on a scale of 1=Excellent to 5=Poor. Powell County (Clay City) reported average overall health was 3.23. Wolfe County (Campton) reported average overall health was 3.85. All clinics combined reported average overall health was 3.54. Some variation was seen between quarters by clinic. As new patients enter the clinic who have not had access to care it is expected this average will be lower. Due to Wolfe County not opening until August it is not unexpected to see the average self-reported health to decrease rather than improve as new patients gain access. Though overall a slight improvement in overall self-reported health was

⁶ Campton Clinic opened on August 7, 2012. 3rd Quarter numbers reflect the period when a social worker was available to Wolfe County patients.

seen it is inaccurate to combine all clinics into a single average due to their being in different stages of clinic growth and establishing a patient base. It is expected to see gradual improvement in these health outcomes through 2013 for both clinics. (See Table 10.)

Study participants are more likely to have multiple study visits if their perceived health status is fair or poor. Due to the significant percentage of missing responses these percentages are of questionable validity and reliability. To address this issue the study form has been changed (pending IRB approval) to place this question at the top, rather than the bottom of the survey instrument to facilitate response completion.

Table 10: Self-reported Health Status

Health Status	Patients	Distribution patients	All Visits	Distribution Visits	Visits/person
Excellent	8	5.3%	9	4.2%	1.12
Very Good	16	10.6%	17	7.9%	1.06
Good	30	19.9%	40	18.7%	1.33
Fair	49	32.5%	76	35.5%	1.55
Poor	16	10.6%	24	11.2%	1.50
Missing	32	21.2%	48	22.4%	1.50
Total	151	100.0%	214	100.0%	1.42

C. *Ability to manage chronic disease*

Study participants self-identified presence of chronic disease by reporting that they had ever had, or currently have any of the following: CHF (congestive heart failure), COPD (chronic obstructive pulmonary disease), pneumonia, CAD (coronary artery disease), diabetes, AMI (acute myocardial infarction) or cancer. These participants were then asked to complete the Chronic Disease Self-Efficacy form at their initial and each subsequent visit.

There were 35 patients who made at least 1 visit to either the Clay or Campton clinic and filled out the self-efficacy survey during the 3rd and 4th quarters of 2012. Of these 35 patients, 6 had a second visit during that same period, and 3 of those 6 patients had a third visit during that period.

Figures 5a and 5b plot the sum of the reduced 6-Item Scale for each patient visit (see <http://patienteducation.stanford.edu/research/secd6.html>). These 6 items are:

- 1) How confident are you that you can keep the fatigue caused by your disease from interfering with the things you want to do?
- 2) How confident are you that you can keep the physical discomfort or pain of your disease from interfering with the things you want to do?
- 3) How confident are you that you can keep the emotional distress caused by your disease from interfering with the things you want to do?
- 4) How confident are you that you can keep any other symptoms or health problems you have from interfering with the things you want to do?

- 5) How confident are you that you can do the different tasks and activities needed to manage your health condition so as to reduce you need to see a doctor?
- 6) How confident are you that you can do things other than just taking medication to reduce how much you illness affects your everyday life?

Each of these items is on a scale from one to 10, with the lower end of the scale representing “Not at all confident” and the upper end of the scale representing “Totally Confident”.

Figure 5a and 5b plot the sum of the 6-item scale by patient and date of patient visit. Figure 5a plots each patient in a separate panel, and Figure 5b shows all the patients and visits in one panel. Patients with only one visit are shown as dots. Lines are used connect multiple visits for patients who had more than one visit.

Figures 5c and 5d are similar to Figures 1a and 1b respectively, except that the first visit for each patient is set at time 0, and each successive visit for a patient is shown as the difference in days from the first visit.

Tables 11a shows descriptive statistics (mean, standard deviation, median, minimum, and maximum) for the sum of the 6 self-efficacy measures for each visit, and Table 11b shows the same descriptive statistics for the time from the first visit (in days) for the second and third visits.

With only 6 patients that reported self-efficacy scores making more than one visit, it is not meaningful to conduct statistical analysis to assess changes in overall scores for this period. Also, since visits for each patient do not follow a regular pattern for time between visits, (i.e. a visit every 3 months), it is not advisable to try to assess or partition the data into 3 month periods. For example, the maximum time from the first to the second visit was 181 days, and the minimum was 8 days (Table 11b).

Figure 5a: Chronic Disease Management

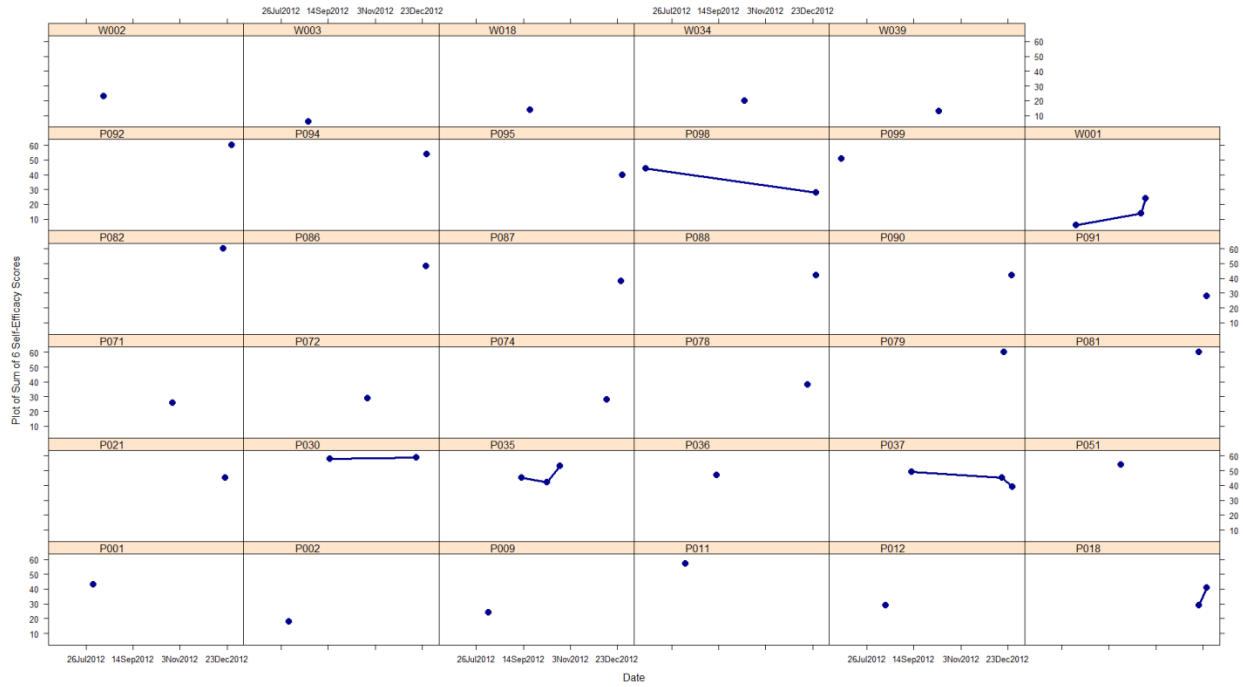
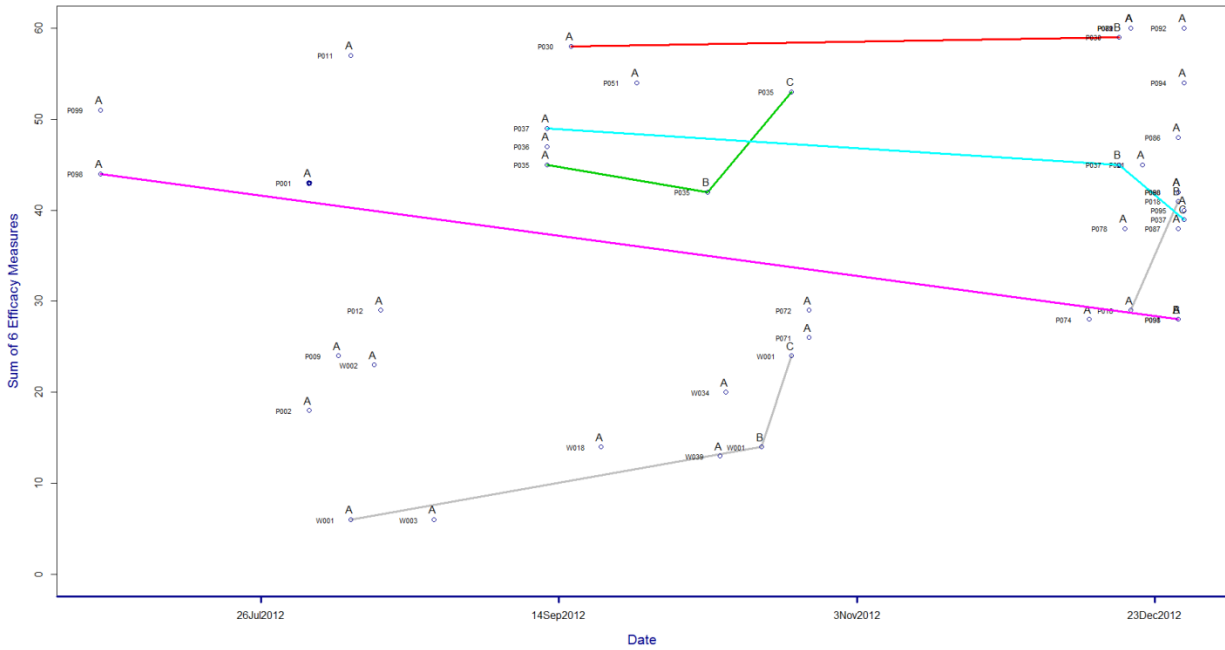


Figure 5b: Chronic Disease Management



Figures 5a and 5b plot the sum of the reduced 6-Item Scale by Date of Visit for Each Patient; 3rd and 4th Quarter 2012. Figure 5a has separate panels for each patient. Figure 5b shows all patient scores in the same plot. A, B, and C represents visits A, B and C for a patient respectively. ID's to the left of each dot are patient ID. Patients with only one visit are shown as dots. Lines are used connect multiple visits for patients who had more than one visit.

Figure 5c: Chronic Disease Management

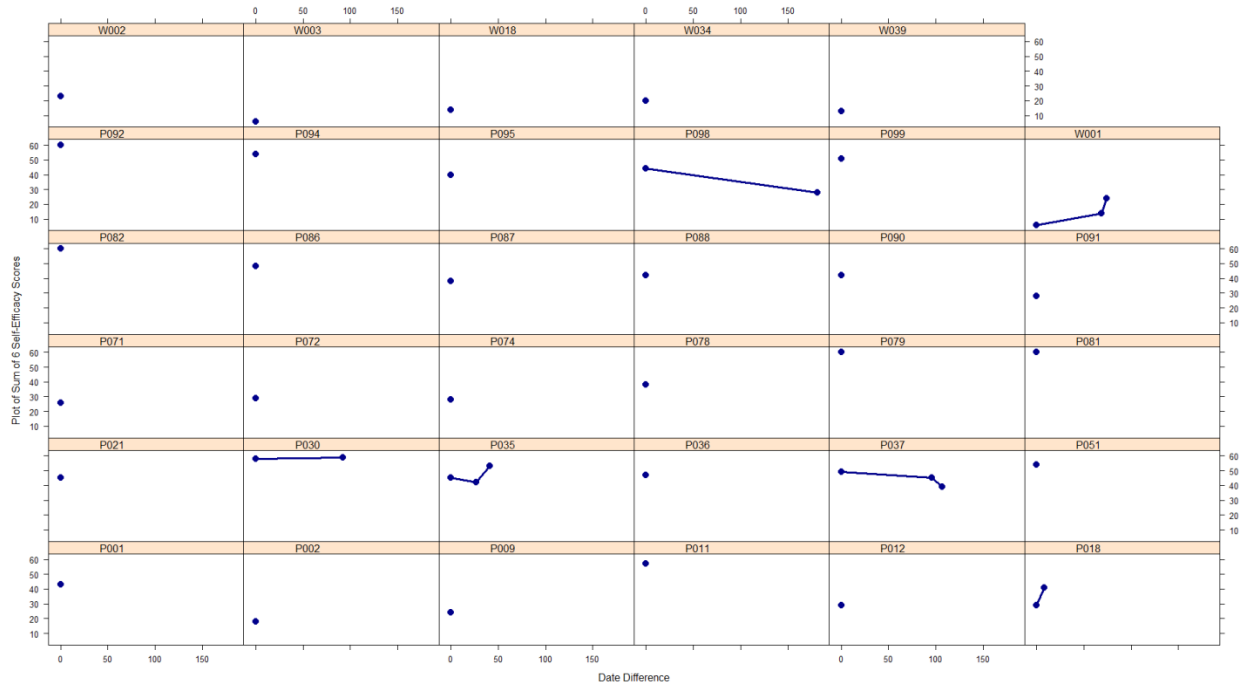
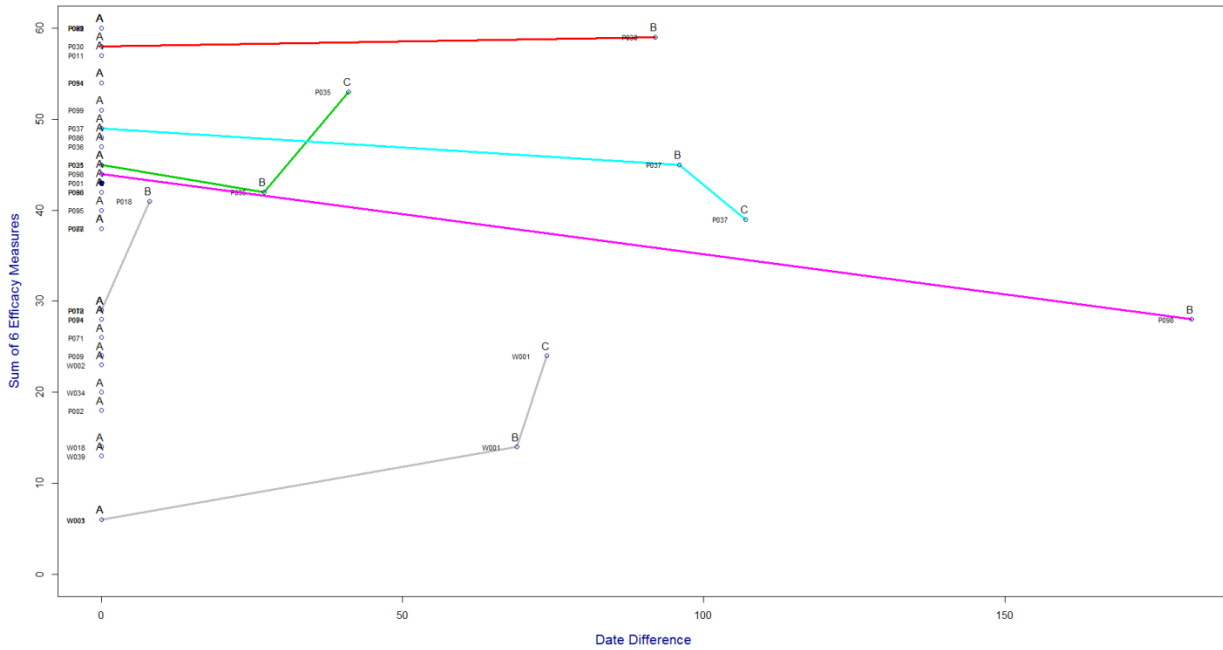


Figure 5d: Chronic Disease Management



Figures 5c and 5d plot of the sum of the reduced 6-Item Scale by Date Difference (“A” visit set at time 0) for Each Patient (3rd and 4th Quarter 2012). . Figure 5c has separate panels for each patient. Figure 5d shows all patient scores in the same plot. A, B, and C represents visits A, B and C for a patient respectively. ID’s to the left of each dot are patient ID. Patients with only one visit are shown as dots. Lines are used connect multiple visits for patients who had more than one visit.

Table 11a: Descriptive Statistics for the sum of the reduced 6-Item Scale by Visit for Each Patient ; 3rd and 4th Quarter, 2012.

Visits	Count	Mean	Stand. Dev.	Median	Min	Max
A	36	37.9	16.1	42	6	60
B	6	38.2	15.4	41.5	14	59
C	3	38.7	14.5	39	24	53
Overall	43	38.0	15.6	41.5	6	60

Only 6 patients had more than one visit (the A visit). Of those 6 patients, only 3 patients had a third visit over the 2012 3rd and 4th quarter period.

Table 11b: Descriptive Statistics for Length of Time in Days of B and C visits from first visit; 3rd and 4th Quarter, 2012

Visits	Count	Mean	Stand. Dev.	Median	Min	Max
B	6	78.3	61.2	80.5	8	181
C	3	74	33	74	41	107

Health behavior addresses a patient's ability to perform individual behaviors related to exercising regularly, understanding their disease condition, obtain help from community, family or friends and communicate with their physician. Baseline score was 7.22 and 3 month follow-up was 8.22. Baseline revealed a moderate to high degree of self-efficacy in patients.

Symptom control addresses a patient's ability to manage their disease, manage their symptoms and manage any shortness of breath. Baseline score was 6.10 and 3 month follow-up was 7.42. Baseline scores reveal a need for symptom control in patients and a moderate degree of self-efficacy.

Role function addresses a patient's ability to do household chores, take care of themselves and dependents as necessary and to engage in social and recreational activities. Baseline score was 5.73 and 3 month follow-up was 6.45. Baseline scores reveal a need for role function improvement in patients and a moderate degree of self-efficacy.

Emotional functioning addresses a patient's ability to control or manage depression regarding their chronic disease. Baseline score was 5.64 and 3 month follow-up was 7.00. Baseline scores reveal a need for emotional functioning improvement in patients and a moderate degree of self-efficacy.

Improvement in self-efficacy scores were seen in all four categories from baseline to three month follow-up. However this result is based on small numbers and a short time period so it is premature to call this an established trend. It will be important in 2013 to continue analysis of these values to identify stable trends. It is expected to see further improvement as time passes and more participants are included in the data for analysis. It will also be useful in 2013 to track self-efficacy scores overtime to see if access to primary care leads to greater self-efficacy. The data collected in 2012 from these study participants have established a baseline for comparison in future year end reporting.

D. Satisfaction with telehealth consultation

As mentioned above, telemedicine implementation was delayed. Three telehealth consults were held to test the system. Instruments have been developed to assess satisfaction with telehealth consultation and to track referrals to the telehealth consult, and will be used as the program is fully implemented.

IV. Discussion

Despite many challenges with the program and evaluation, we have established two new access points for primary care in two underserved communities and overcome significant obstacles to establish the infrastructure for telehealth specialty consultation.

The two clinics served 687 patients during 2012, and we've collected baseline data on many indicators that will be used to measure changes in access, health status, and ability to manage chronic disease.

We have tested a model for delivering care through a Community Based Health Delivery Model which will be spread to other parts of the state and help us prepare for the implementation of the Affordable Care Act, when we will have 280,000 covered lives with new medial cards who are seeking access to health services. Because of the successful establishment of these two clinics, we have received a continuation grant to build out the model to two additional sites.

This project proposed to establish a new integrated model of health services delivery between primary and specialty care services at the local patient level in two primary care clinics and establish a new integrated physical health and behavioral health model in one of the primary care clinics. The primary care clinics established a new APRN managed care model. All of these models are pushing the boundaries of established standards. We are working with legislators and state agencies to change regulations and reimbursement barriers that are impeding full implementation of our model.

Many of the reasons why we chose to establish primary care clinics in Powell and Wolfe counties (geographic barriers to access to healthcare, poor economic development, etc.) became barriers to our own project implementation. The biggest challenge that we have faced, especially in implementation of our telehealth component in the two primary care clinics, has been lack of adequate telecommunications infrastructure. Multiple layers of service providers (Windstream, AT&T, local telco, KentuckyOne telecommunications connectivity, and Catholic Health Initiatives (CHI) national telecommunications connectivity) expanded complications to our progress. The telecommunications situation was compounded even further by the unprecedented system-wide phased roll out of the electronic medical record (Allscripts) in the clinics. At the time of our telehealth implementation there was no problem with our connectivity between the primary care site and a specialist. However, we began to experience severe degradation in audio/visual transmission. It took almost six months of tests and trials, vendor investigation and local, regional and national network monitoring to understand that the competition for bandwidth at the primary care clinics was between the electronic medical record and telehealth equipment. Convincing telecommunications companies to install new high capacity telecommunications lines to two primary care clinics in Powell and Wolfe counties in Appalachian Kentucky was costly and complicated.

We have learned a valuable lesson which has better prepared us in planning additional primary care clinics. Our painful lesson has also been understood at a KentuckyOne level as the

roll out of the electronic medical record within KOH hospitals has been halted because of lack of telecommunications infrastructure.

The fact that we have been able to accomplish this two year grant project within a period of local, regional and national upheaval is remarkable. As our grant was awarded, our SJHS organization went through an extensive one-year merger period. As we became KentuckyOne, our organization took on new partnerships with University of Louisville Hospital, James Brown Cancer Center. These new partnerships will be a catalyst for new telehealth applications (emergency telepsychiatry, telestroke, oncology) and new patient and professional educational opportunities. We believe these additional expert resources will benefit our patients along the continuum of care which includes our primary care clinics. It also provides us with additional research opportunities to enhance health care services for all of Kentucky citizens.

Evaluation challenges: The evaluation was a challenge from the beginning because the federal regulations and requirements that were not initially clear or totally absent in the original FHKY/KHFI RFP. These requirements became clearer as they were imposed weeks and months throughout the grant years. Further complications were introduced, beyond administrative and financial components, with the multiple layers of evaluation approvals, which resulted in multiple redesigns of our research instruments. As a result of these layers of approval, we did not receive final WIRB approval of all research instruments until August 2012, the last four months of the two-year grant project. Thus, we only had a very short window of opportunity to enroll participants in the study and gather data as planned in the SEP, yet, in the meantime, we had been required to submit quarterly reports on our progress. Once data collection began there were a number of other challenges, which have been mentioned throughout this report. We are working on addressing many of the challenges in 2013.

V. Next Steps for the Program

The Community Based Health Delivery Model with the primary care clinic as the medical home is the core of delivering coordinated care in rural Kentucky. KentuckyOne Health, formerly Saint Joseph Health System is investigating additional ways that we can build upon this Community Based Health Delivery Model by adopting new technology, forging new partnerships, or creating new services to strengthen care coordination.

The expected impact of this coordinated-care strategy is community-wide improvements in health status, health outcomes, and quality of life for all residents throughout the SJHS service area. KentuckyOne leadership and CHI national leadership are supporting this initiative financially and with staff expertise on multiple levels. They are closely monitoring this Community Based Health Delivery Model, which may also expand beyond KyOne/SJHS service area, through regional replication and throughout the national Catholic Health I health system.

Our vision is to expand the Community Based Health Delivery Model to up to 10 total primary care clinics in underserved communities, which will serve as medical homes to those who do not have a primary care provider or easy access to specialty services. From that core

primary care clinic network, patients may receive the appropriate level of care in an integrated manner. This model includes access to behavioral health services as developed in the integrated physical/behavioral health delivery system in Wolfe County/SJPCC through collaboration with Kentucky River Community Care (KRCC). The model also includes a Social Worker, a Nurse Transition Coach. Depending on community need, the model may also include radiological services, dental services, community health workers.

Primary Care. Within the next two years, we plan to open two new virtual primary care clinics in additional counties in rural Kentucky. To eliminate barriers for patients completing necessary paperwork, at these new and existing clinics at the point of registration, we are working toward providing patients with iPads or tablets with audible files. The purpose of this pilot is to assist patients with low literacy levels with the registration process, the process of consenting to participate in research studies such as this, and completing the necessary forms and survey instruments. We have received a one-year (2012) KHFI continuation grant to open the two primary care clinics and pilot the iPads.

Diagnostics. Enhancement of the Community Based Health Delivery Model with diagnostic services is being considered outside the scope of this grant funding, to determine costs/benefits of renovating the existing mobile coach to provide digital Mammography, Doppler, Ultra Sound, and schedule this Mobile Diagnostics Unit to travel to each of the primary care clinics to deliver these services. KentuckyOne Leadership is reviewing the mobile coach and feasibility of renovation.

School Telehealth. We are planning to enhance the Community Based Health Delivery Model with School Telehealth services outside the scope of this grant funding in a test pilot in Powell and/or Wolfe County. We have initiated discussion with the School Superintendents and other staff in both counties. However, we are also following the current legislative action defining health delivery in schools. There are multiple issues (sharing health information, level of skill for onsite provider, reimbursement etc.) that need definition and resolution before we can begin a School Telehealth pilot. We do have a vendor who may be willing to collaborate with us in this pilot by providing the telehealth equipment.

Health Department. We are working to enhance the Community Based Health Delivery Model in collaboration with Powell County Health Department. We were approached by the Director of the Health Department because of state funding cuts to their budget. We are working with KentuckyOne leadership to develop an external partner agreement that will enable us to provide identified services.

In addition, we are working with the CHI Institute for Research and Innovation (CIRI) in participating in a Powell County Community Coalition to address community needs and seek further funding opportunities to accomplish coalition goals.

BUDGET

FHK – Year End Report 2.28.13

Budget Narrative Analysis

There were no additional expenses incurred during our extension period of January 16 – February 28, 2013.

Federal Financial Report (FFR)				Grant Agreement: 2011KHF1013					
					Saint Joseph Health System				
				2012					
2.28.13									
Quarter	Funds Received	Funds Received Federal	Funds Received Foundation	Cash Match Raised	Funds Expended Federal	Funds Expended Foundation	Funds Expended Cash Match	Balance	
1/1/12 - 3/31/12	\$ -	\$ -	\$ -	\$ 62,500	\$ -	\$ -	\$ 112,843		
4/1/12 - 6/30/12	\$ 62,500	\$ -	\$ 62,500	\$ 62,500	\$ -	\$ 37,667	\$ 105,532	\$ 24,833	(FOU)
7/1/12 - 9/30/12	\$ 125,000	\$ 62,500	\$ 62,500	\$ 62,500	\$ 41,265	\$ 24,833	\$ 135,354	\$ 83,735	(\$21,235 (FED) \$62,500 (FOU))
10/1/12 - 12/31/12	\$ -	\$ -	\$ -	\$ 62,500	\$ 21,235	\$ 32,767	\$ 147,526	\$ 29,733	(FOU)
Total	\$ 187,500	\$ 62,500	\$ 125,000	\$ 250,000	\$ 62,500	\$ 95,267	\$ 501,254		
EXTENSION									
1/1/13 - 2/28/2013	\$ 62,500	\$ 62,500	\$ -		\$ 62,500	\$ 29,733	\$ 931.81	\$0 Balance	
GRAND TOTAL	\$ 250,000	\$ 125,000	\$ 125,000	\$ 250,000	\$ 125,000	\$ 125,000	\$ 502,186		

As of December 31, there was a balance of \$29,733 of Foundation State Funds and an outstanding Federal Fund distribution of \$62,500 remaining. The delay in receiving the last distribution of funds was due to the fact that our 4th quarter expense verification did not occur until after January 1, 2013. Therefore, a no cost-extension was requested on January 16, 2013 to allow for a review of 4th quarter report and supporting documentation that would in turn support the final distribution of federal funds to us in January 2013.

As of February 28, 2013, \$125,000 of Federal and Foundation funds, for a total of \$250,000, have been expended. A match of \$931.81 is reported against the projected amount of \$1,319 in our letter dated January 15, 2013. The difference of \$387.19 is non-productive time that was incorrectly included in the \$34,614 estimate for 1st quarter grant funded personnel costs. This brings our total match for Year 2 grant to \$502,186.