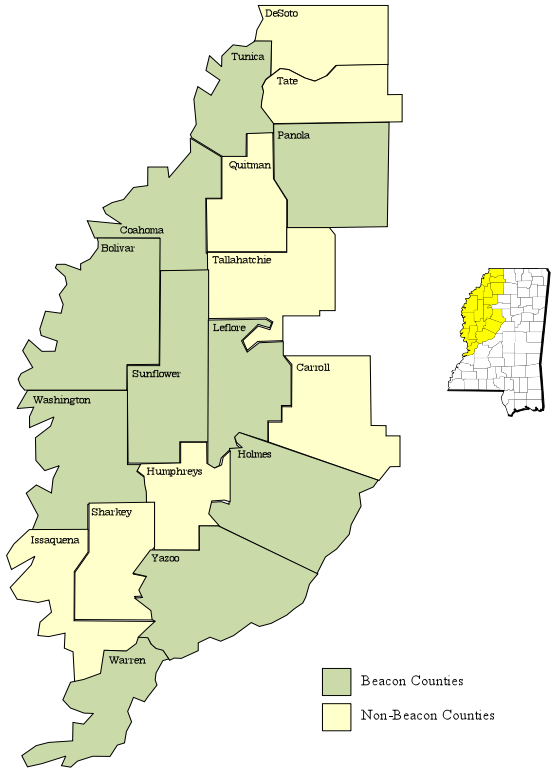
DELTA BLUES BEACON QUARTERLY REPORT (FOR QUARTER ENDING MARCH 31, 2013)

DELTA BLUES BEACON CATCHMENT AREA



Source: Beacon Plan

SUBMITTED: APRIL 15, 2013

PUBLICATION AND DISSEMINATION OF FINDINGS

Copyrights and license to publish and disseminate findings are granted to the Parties and their authors for publication in academic or scholarly publication or presentations with the stipulation that DHA and its projects will be included in authorship. The Parties will also have rights to post final reports or deliverable products on its internet website and to perform derivative works using data obtained under this contract, provided that proprietary and confidential information are protected from inappropriate use or disclosure. These rights are granted with the provision that DHA be notified and cited as a cooperating agency and author where appropriate. Notification of intent to publish, whether an oral or poster presentation, submission to scholarly publications or media, must be provided to DHA in writing at least thirty (30) days in advance. Project promotional literature or media efforts (e.g. flyers, brochures, advertisements, etc.) shall be submitted to DHA for approval at least thirty (30) days prior to publication or dissemination. All presentations, abstracts, published works, media efforts, and manuscripts must include the following statement:

The Delta Health Alliance is gratefully acknowledged for support of this project through the Office of National Coordinator Grant Number 90BC0004-01. The Delta Health Alliance is a non-profit organization based in Stoneville, MS that advocates, develops, and implements collaborative programs to improve the health of citizens in the Delta through the support of partnerships that increase access and availability of health care, conduct and apply health research, or offer health education programs that foster healthy lifestyles for Deltans. For more information about the Delta Health Alliance visit *www.deltahealthalliance.org*.

TABLE OF CONTENTS

DELTA BLUES BEACON QUARTERLY REPORT (FOR PERIOD ENDING MARCH 31, 2013)

QUANTITATIVE REPORTS

CRITICAL ACTIONS / MILESTONES

For Q1 2013, DBB made significant progress in achieving targets for measures for Health Information Technology (HIT), Health Information Exchange (HIE), Clinical Decision Support, Clinical Performance Improvement (Learning Collaborative), Care Transitions (CT) and Medication Therapy Management (MTM).

For HIT, the DBB continued its efforts to improve EHR utilization and demonstrate improvement in data quality across 3 clinical quality measures (HbA1c, LDL, and BP screening) and re-educate clinics on workflow and data collection.

In addition to previous achievements in implementing HIE in 33 sites (47 providers), DBB achieved HIE implementation and training of hospital provider and personnel in 3 of 4 hospitals: DRMC, South Sunflower, and Greenwood Leflore. Efforts to establish CCD exchange for North Sunflower was almost complete by March 31, but actual go-live will not occur until mid-April. Q2 HIE efforts will focus on support and training to improve utilization. Implementation of the immunization registry interface for 8 remaining sites was almost complete and pending Department of Health supervisory approval to proceed to production. During Q2, all DBB providers will be connected to the state HIE and the exchange of immunization data with the state registry will be operational.

The DBB implemented CDS for two additional providers, reaching a total of 28 clinics. The DBB increased CDS utilization 9.1% over the previous quarter, almost reaching its 10% target.

As of March 31, 2013, CT, and MTM interventions achieved Q1 targets for program recruitment and participation. For Q2 and Q3 these interventions will discontinue active recruitment of program participants. Q2and Q3 activities will focus on follow-up assessments for Q1 participants and completion of final evaluations for these interventions. Q2 activities of the Learning Collaborative will focus on provider/ clinic performance reporting and assessment of key outcome measures.

The DBB achieved an average of 99 diabetic retinopathy eye exams per month for Q1, showing significant improvement over results from the previous quarter.

Meaningful Use attestation lagged during Q1 because of delays in getting measure reporting tools working. If all providers currently working with the REC continue to meet MU achievement goals for 2013, then the DBB should come close to meeting its 60%MU goal.

TARGET QUALITY MEASURES

At the inception of the DBB project, ONC challenged the DBB team to target 4-5 key measures on which our focus for performance improvement would rest, keeping in mind the remaining best practices of care for diabetes. It is the goal of the DBB to report outcomes for Cohort 3 at a later date after lab interfaces and utilization are constant for at least twelve months.

Although DBB clinical interventions do improve the quality of care in primary care settings, the research team has observed over time that interventions do not typically improve all measures of care for diabetes control at the same time within an individual clinic setting. This is consistent with the literature. Interventions tend to improve quality in one or two key measures, while expanding improvement to other measures as more interventions are implemented or are targeted over time. More specifically, the implementation plan of the clinical transformation/performance improvement intervention challenges providers to focus on processes of care incrementally to make strides in improved standards of care within primary care sites. Metrics for all measures including the key measures are included in Attachment A: Delta Blues Beacon Performance Metrics Template.

KEY MEASURES AND NOTABLE TRENDS

All sites showed improvement in at least three of the five key measures. The 6-month blood pressure screening measure seems to be the most difficult to improve. A comparison of cohorts 1 and 2 is included in Attachment A: Performance Metrics Template, and Attachment B, the Non-Key Measures.

Trend graphs for key measures are demonstrated in Exhibits 1-5 below, including a mean trend line in RED to show levels of improvement. Patients included in these trends are active diabetics between the ages of 18 and 75 that have had at least one clinic encounter in the 3-year Beacon reporting period. Reporting periods are broken down into 12-month increments of time for screening rates, and these reporting periods increase by three months every quarter for the sake of quarterly reporting to ONC.

EXHIBIT 1A AND 1B: PERCENT OF PATIENTS WITH LDL VALUES < 100MG/DL IN A 12 MONTH PERIOD

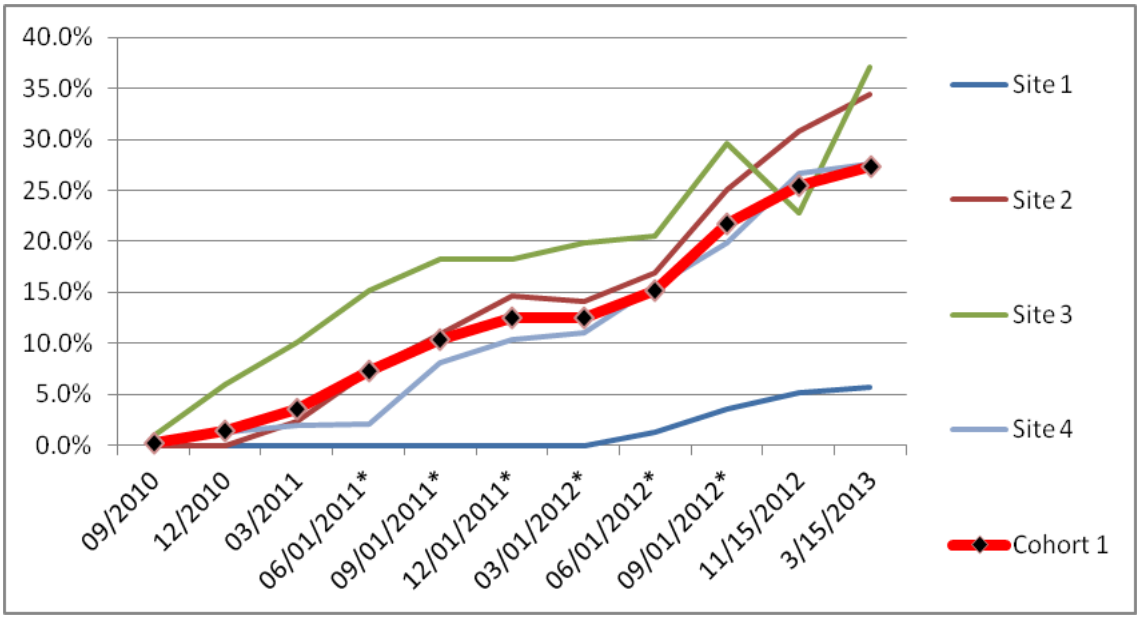


Exhibit 1A – Cohort 1

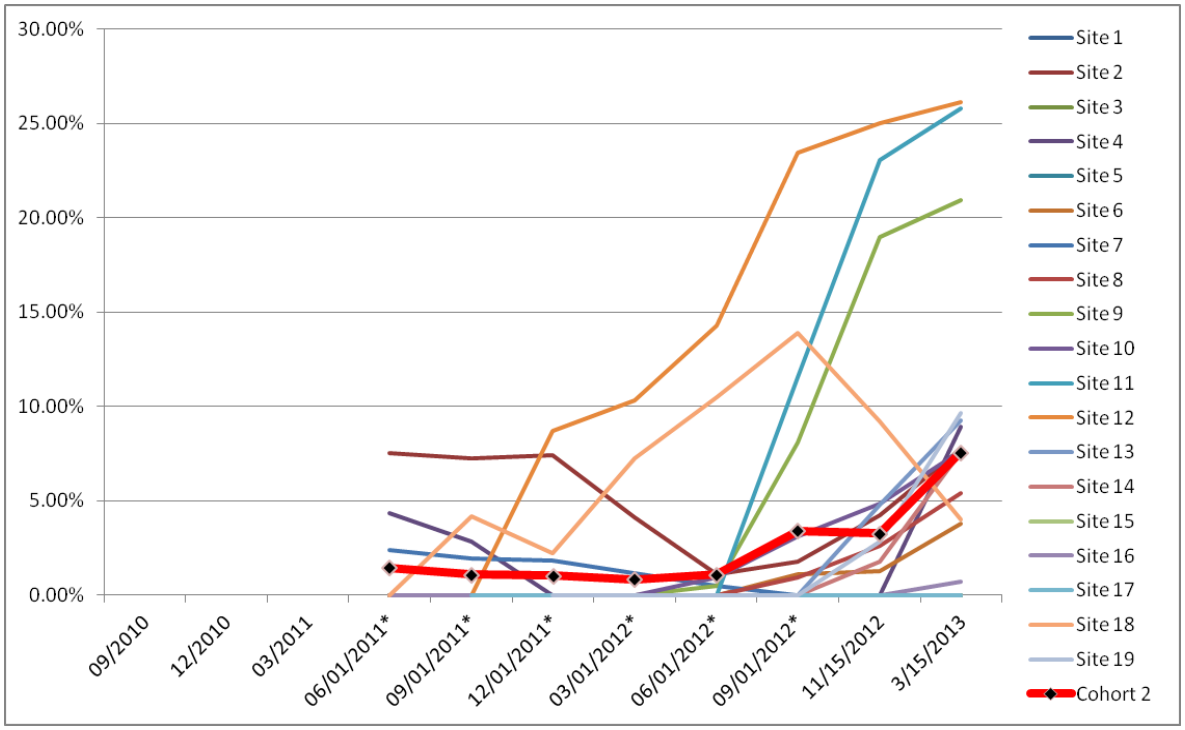


Exhibit 1B – Cohort 2

Patients with controlled LDL levels are definitely increasing as a result of DBB efforts. Although it is not apparent in these graphs, LDL screenings increased as well, leading to this performance trend. Many providers were not ordering LDL labs at all prior to this project. It is the goal of the DBB to get this metric to at least 50%.

EXHIBIT 2A AND 2B: PERCENT OF PATIENTS WITH AT LEAST ONE NEPHROPATHY SCREENING EVERY 12 MONTHS

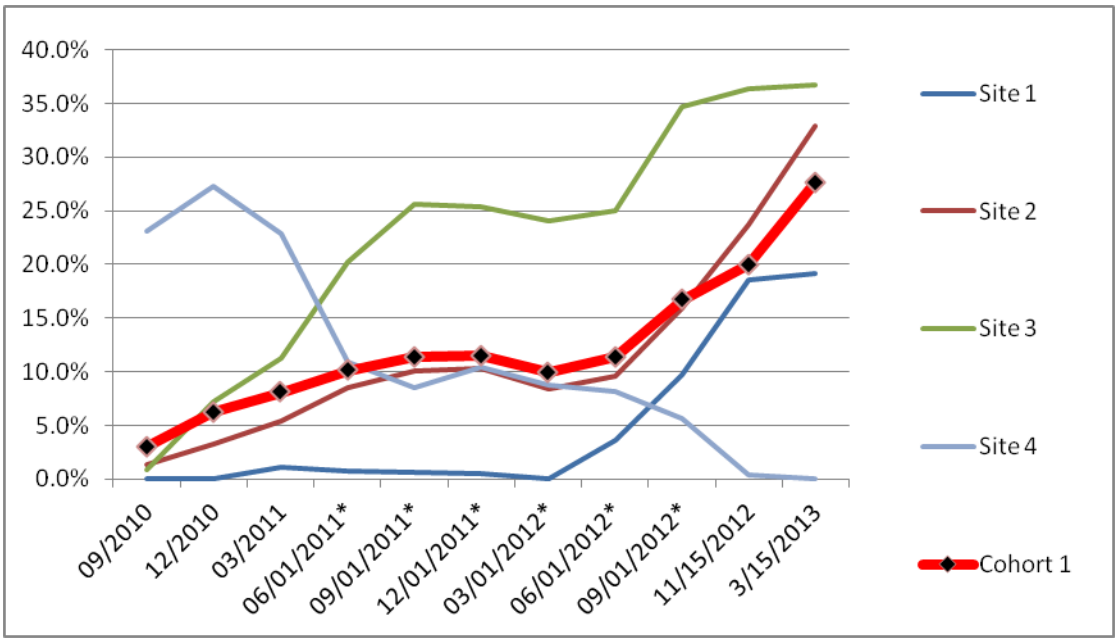


Exhibit 2A – Cohort 1

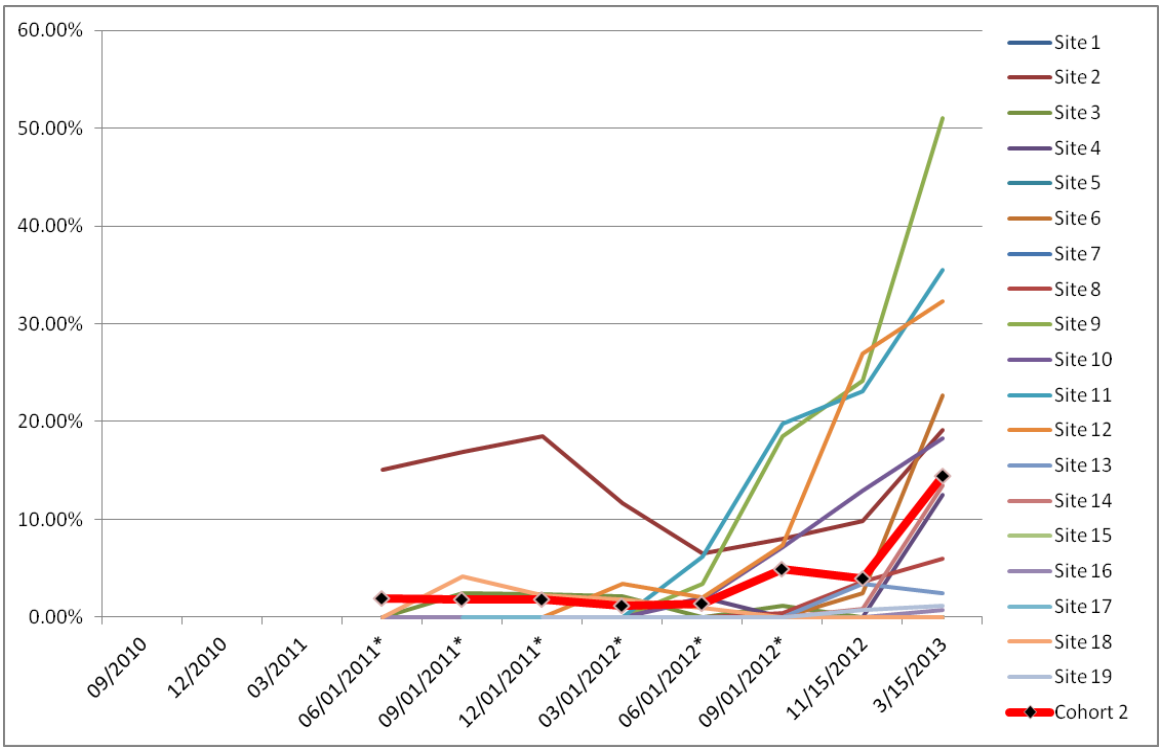


Exhibit 2B – Cohort 2

Although the nephropathy screening has increased through the course of the project, the screening rate is still low. It is the goal of the DBB to continue promoting this practice.

EXHIBITS 3A AND 3B: PERCENT OF PATIENTS WITH AT LEAST ONE FOOT EXAM EVERY 12 MONTHS

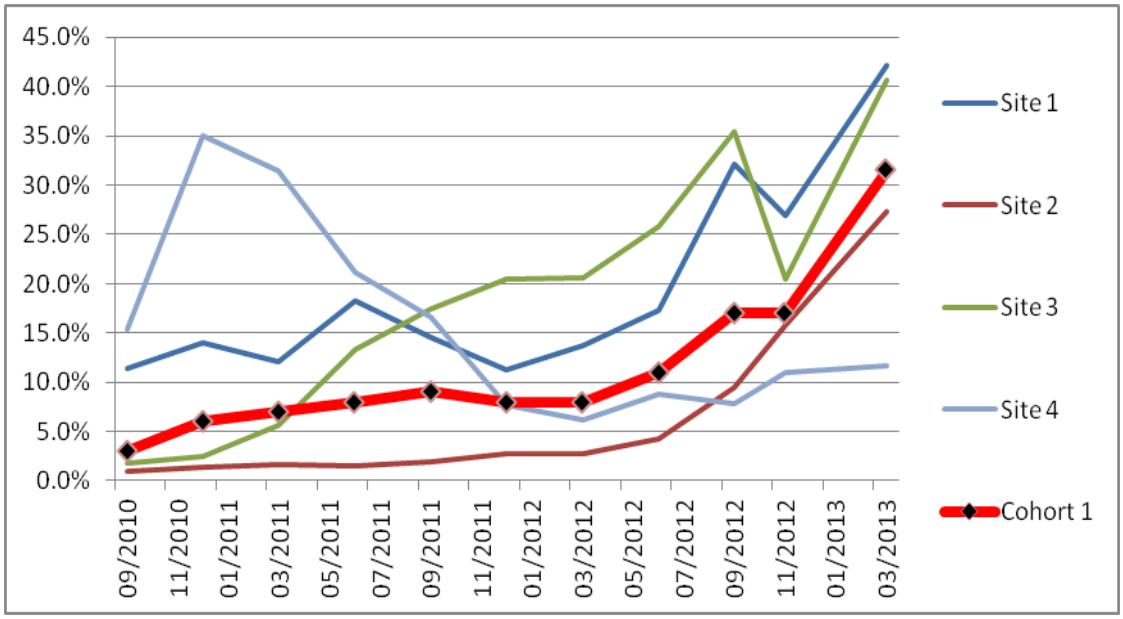


Exhibit 3A - Cohort 1

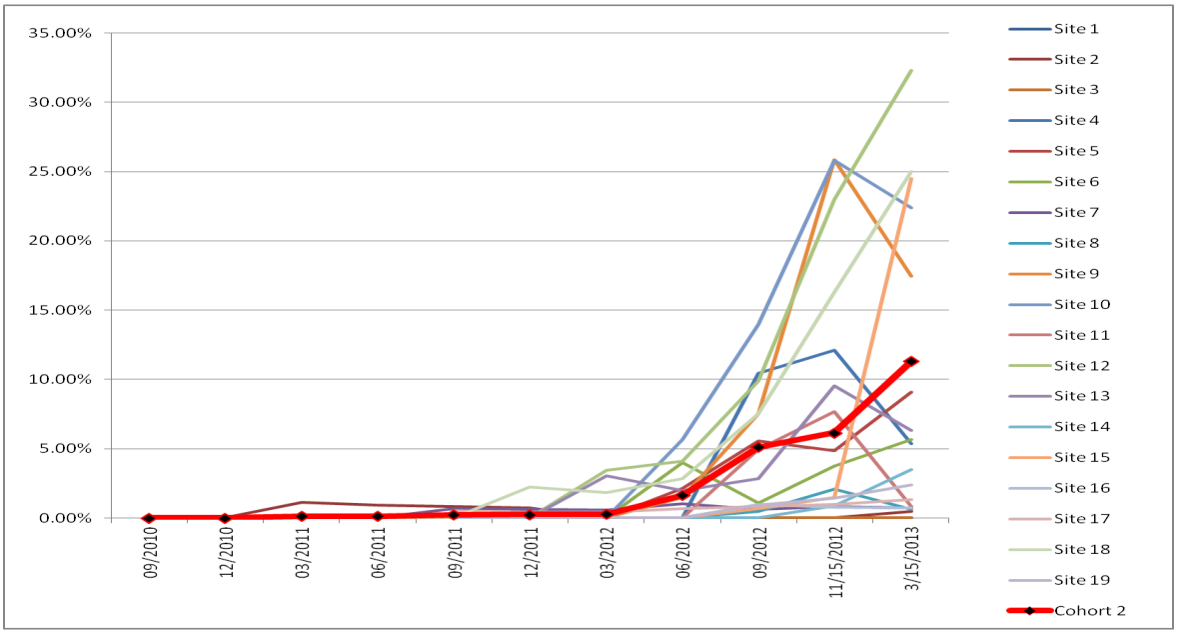


Exhibit 3B - Cohort 2

It is very encouraging to now see almost a third of all diabetics receiving foot exams compared to none three years ago. It is the goal of the DBB to continue promoting this measure as well to ensure that all patients are receiving annual foot exams.

EXHIBITS 4A AND 4B: PERCENT OF PATIENTS WITH AT LEAST ONE EYE EXAM EVERY 12 MONTHS

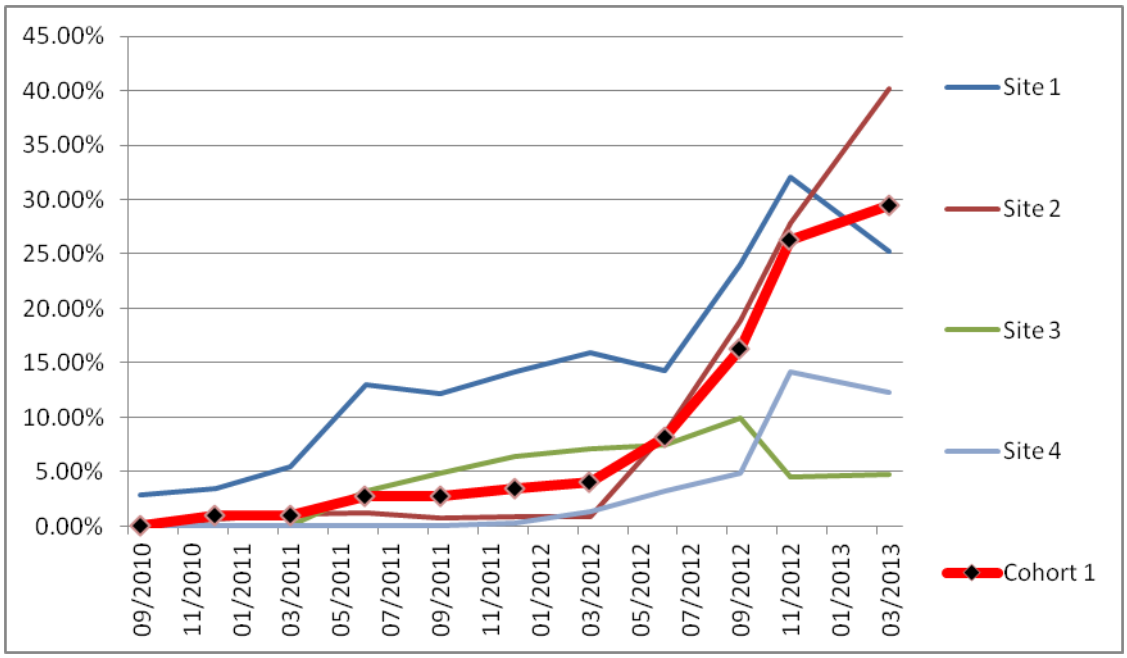


Exhibit 4A - Cohort 1

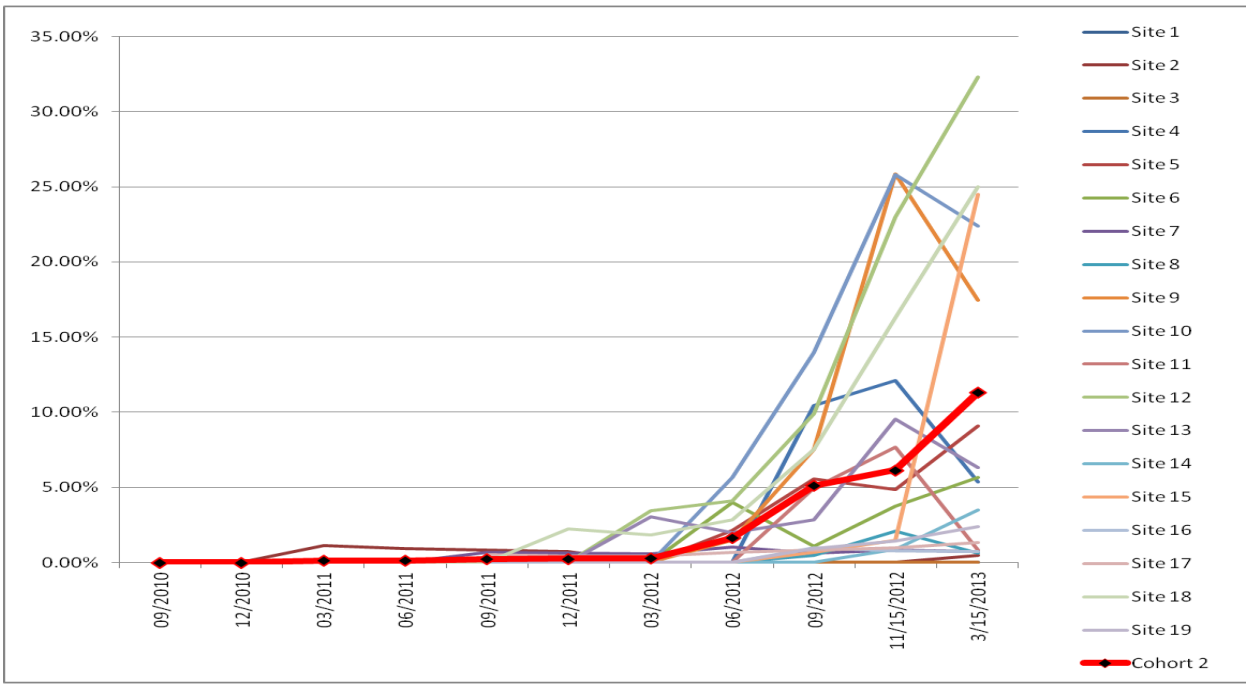


Exhibit 4B - Cohort 2

With the placement of eye cameras in clinics, the eye screening metric has improved 10-30% in all sites. This is great improvement. This is the measure that many providers do not assess, and they are now assessing for the first time as a result of DBB efforts.

Exhibits 5A and 5B: Percent of Patients with a Blood Pressure Screening every 6 months

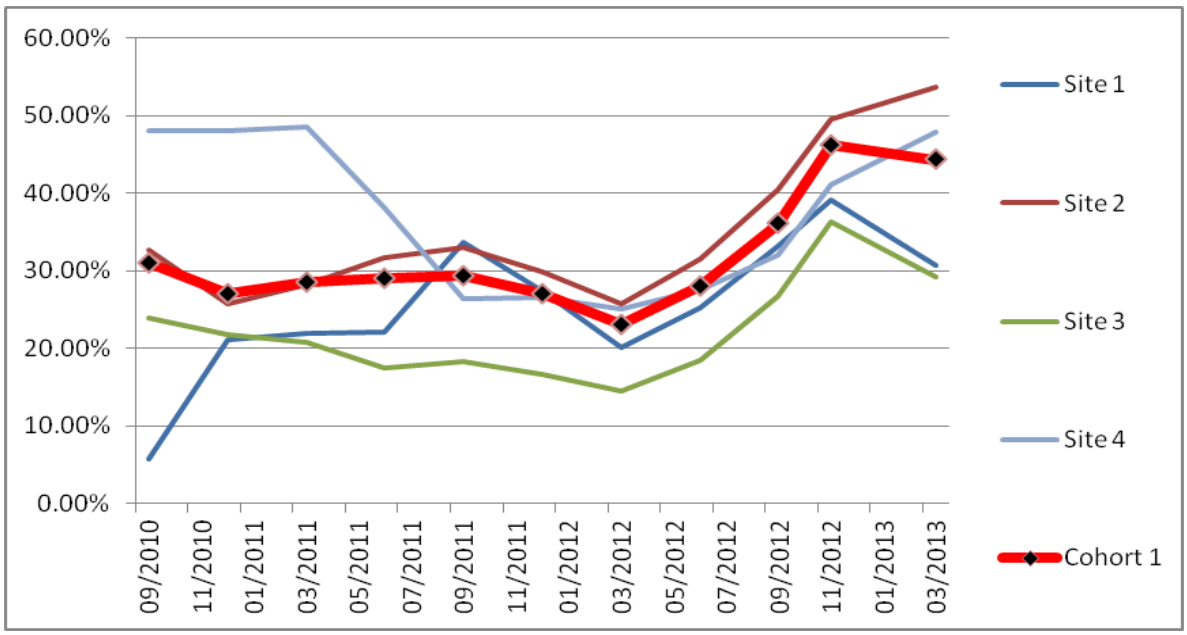


Exhibit 5A - Cohort 1

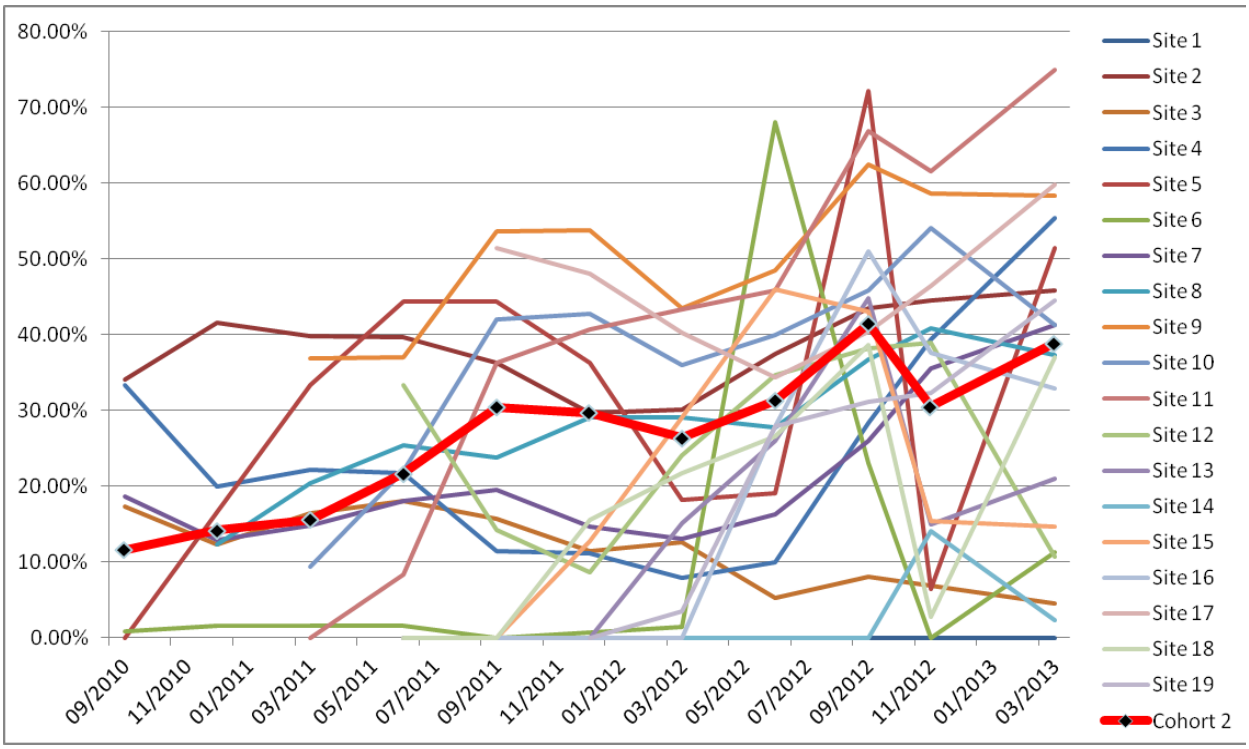


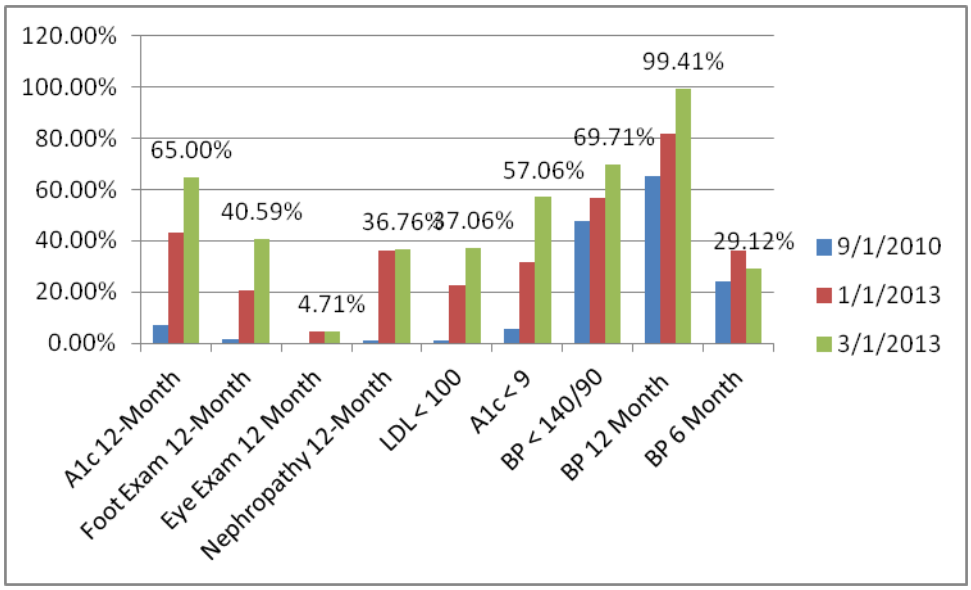
Exhibit 5B - Cohort 2

The 6-month blood pressure screening has shown gradual improvement over time. This metric is dependent on providers getting their patients back in for follow-up visits, which makes this metric a little more difficult to improve. However, attaining an almost 45% screening rate for 6-month blood pressure is evident.

Evidence of Change (Initial EHR Implementation Versus Post EHR Implementation)

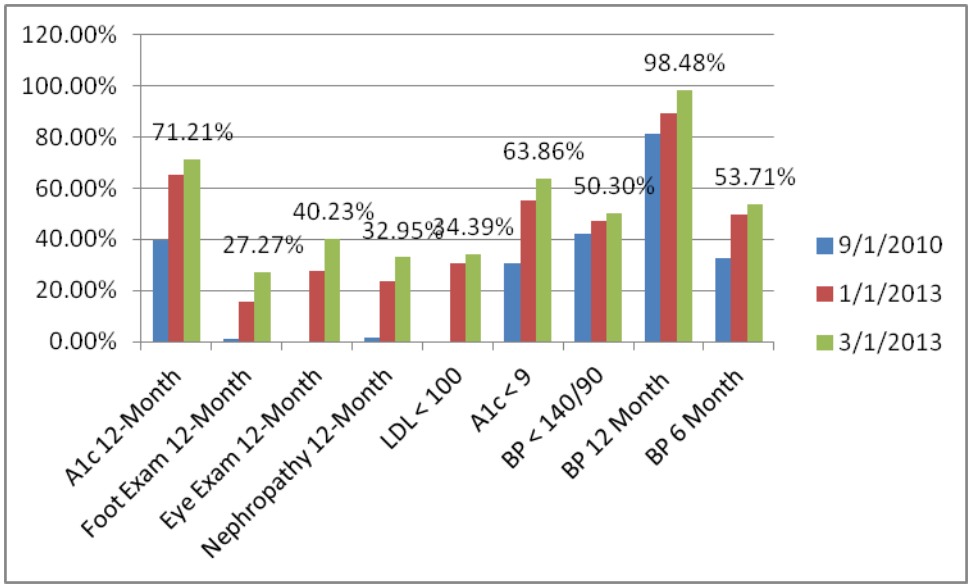
The DBB research team has been conducting further analysis to demonstrate whether significant improvement from initial EHR implementation to the last year of Beacon was evident over time. Three sites were selected for this analysis because of their data integrity and greater exposure to Beacon interventions. Comparisons were only made for diabetic patients that were considered active, which means they had at least one clinic visit in that 12-month period of time. All data was electronically extracted from the EHR through the analytics reporting tool. Data for this comparison contains an end date of March 15, 2013.

Exhibit 6: Baseline Versus Post-Test Measures – Cohort 1, Site 3:



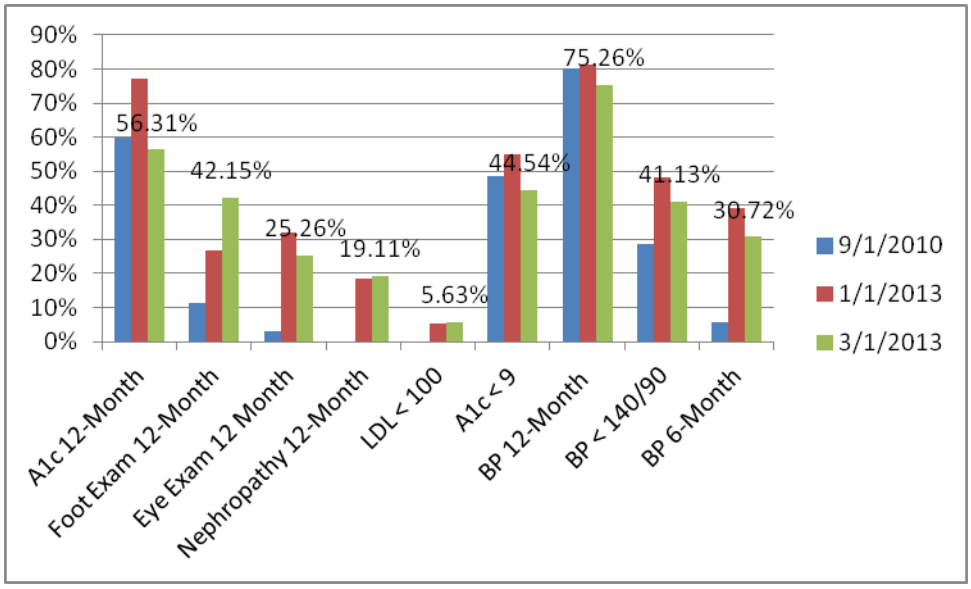
Site 3 has demonstrated improvement in 6 of 9 Beacon measures. This site does not have an eye camera on site, which could improve eye screenings overall.

EXHIBIT 7: BASELINE VERSUS POST-TEST MEASURES – COHORT 1, SITE 2:



Site 2 has shown improvement in all Beacon measures. Their diabetic patients are better controlled in BP, A1c, and LDL and also compliant in eye and foot exams. The DBB considers this site a "star" site!

EXHIBIT 8: BASELINE VERSUS POST-TEST MEASURES – COHORT 1, SITE 1:



Site 1 has shown improvement in 3 of 9 Beacon measures. This site's baseline measures were much higher than other sites due it being a Federally Qualifying Community Health Center and already having a data management plan in place to monitor outcomes. This site also had significant provider

turnover halfway through the DBB project. The DBB team is working to ensure that this site continues to move in a positive direction.

Cost Analysis of Hospital Discharge Data

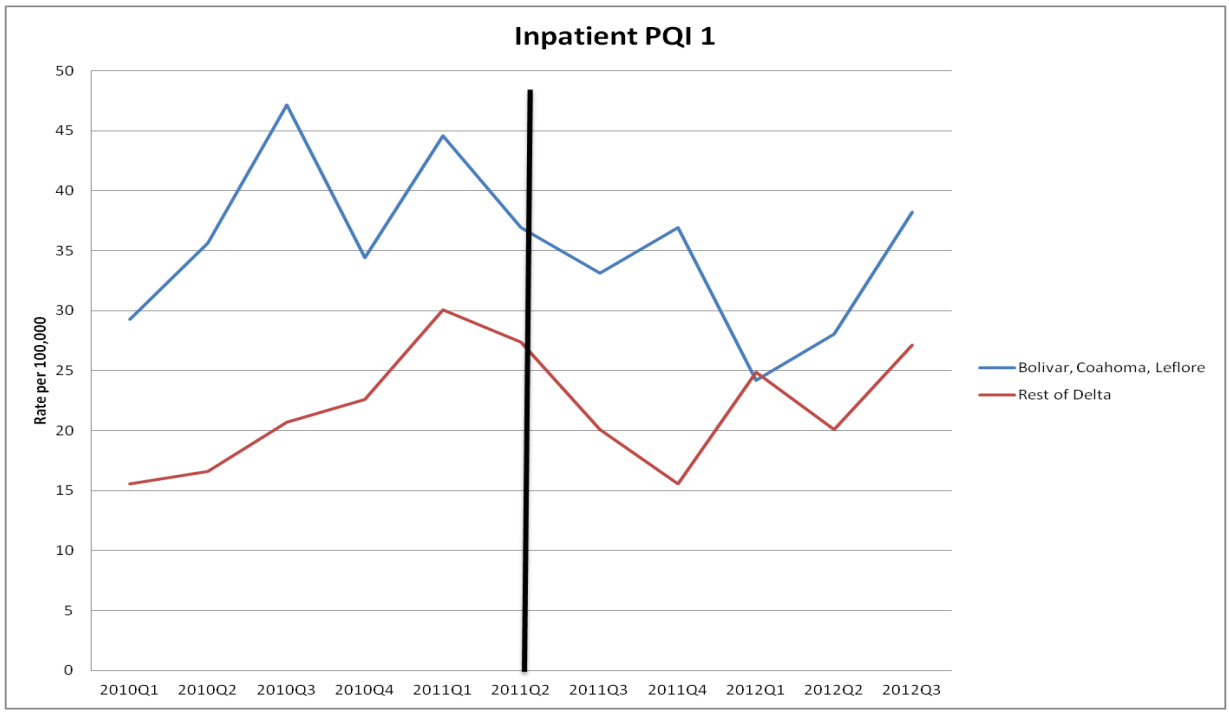
In 2010 the DBB chose hospital discharge data as a data source for cost measures to evaluate the economic impact of clinical interventions and HIT initiatives in the catchment area. This was the only viable source available in Mississippi. It was also the first year of data collection for the state discharge data registry. Unfortunately, during the course of the Beacon project, it appears that the methodology for collecting the data changed midstream. The number of diabetic admissions also increased greatly in hospitals in 2012 for unexplainable reasons. These two factors worked against our cost analysis greatly, making it difficult and almost impossible to determine a true impact of our interventions.

PQI measures are national outcome measures for hospital admission data. The three measures chosen by the DBB are measures focused on diabetic admissions—short term complications, long term complications and those that are uncontrolled patients with high A1c or blood pressure levels. The determination of the patient population represented in each measure is given in the CPT codes in the billing data. The drawback of these measures is that the data source is billing data and not encounter-level data that would actually show the details of the visits. Only demographic and billing code data is used in this analysis.

The analysis concludes that there simply has not been enough time for the data and interventions to level out and show an impact in the catchment area. The intervention hospitals also have a history of the largest number of diabetic encounters in the catchment area. The care transitions project that was implemented directly in these hospitals did not touch enough patients, and the clinics surrounding the hospitals did not touch enough diabetics to show an economic impact as evidenced through analysis of hospital discharge data.

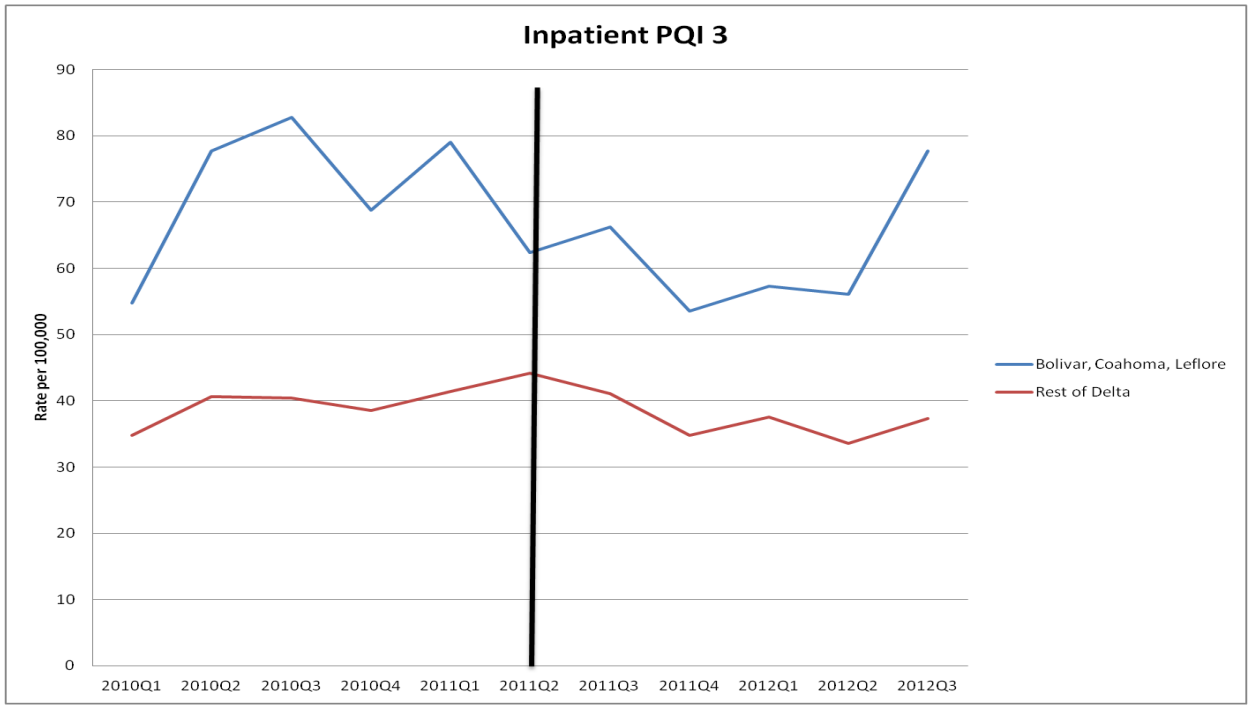
The research team does believe, though, that an impact would be evident with more time. However, current results are not conclusive enough to make any impact statements at this time. Exhibits 9-11 demonstrate the impact of interventions thus far in inpatient hospital encounters. Exhibits 12-14 demonstrate the impact of interventions thus far in emergency room encounters. The dark black line represents the separation between baseline and intervention data.

EXHIBIT 9: INPATIENT PQI 1: SHORT TERM COMPLICATIONS



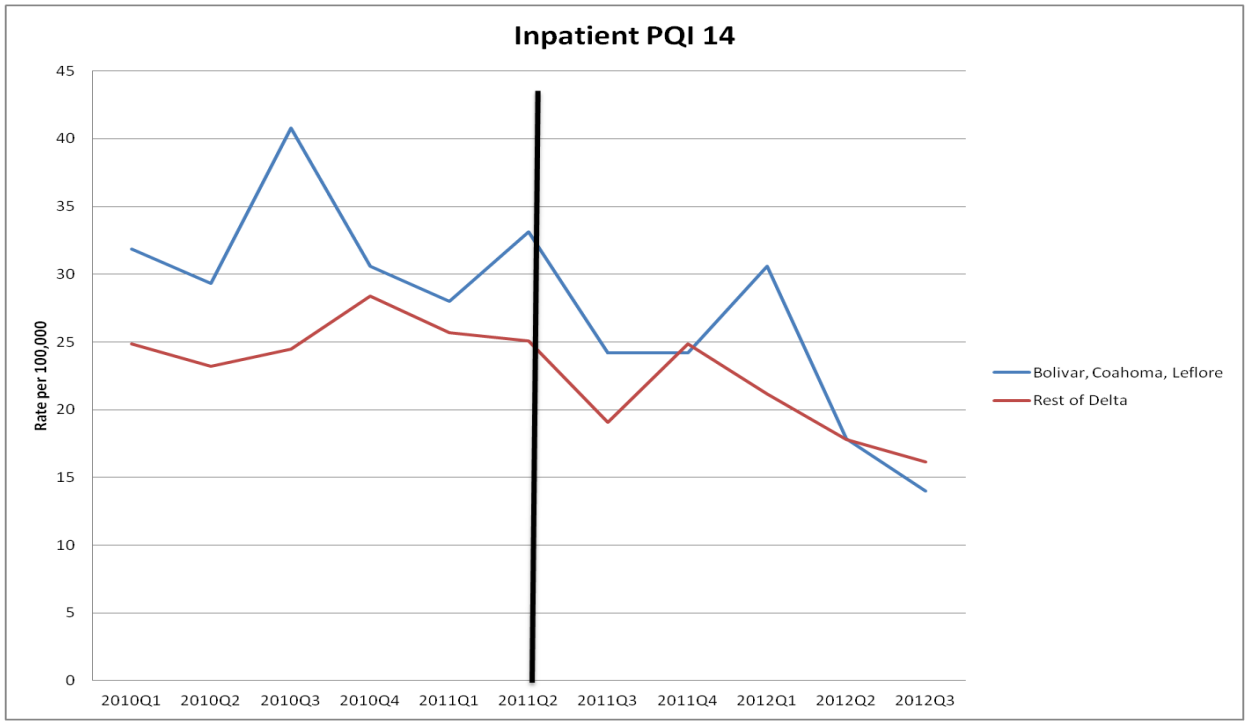
There is a larger number of patients in the intervention hospitals with short-term complications overall. This number did decline throughout 2011, but rose again in 2012.

EXHIBIT 10: INPATIENT PQI 3: DIABETES LONG TERM COMPLICATIONS



There is a larger number of patients in the intervention hospitals with long-term complications in the inpatient data. Like the short-term ratio, this number declined in 2011 but rose again in 2012.

EXHIBIT 11: INPATIENT PQI 14: UNCONTROLLED DIABETES ADMISSION RATE

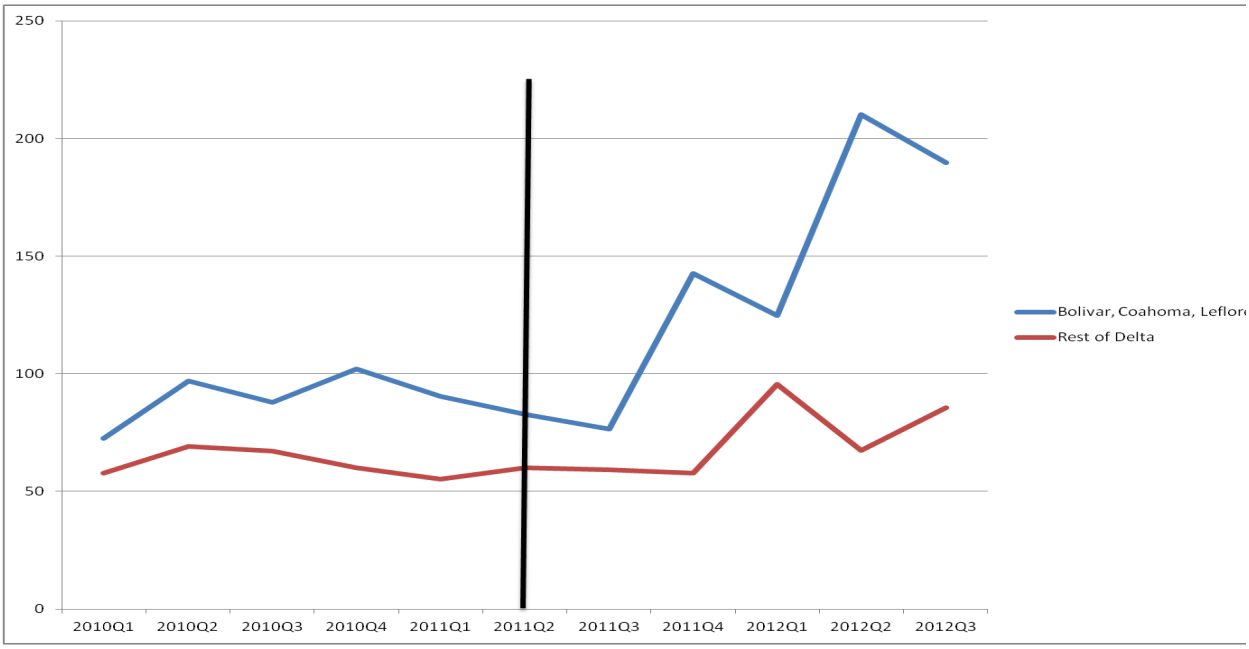


The number of uncontrolled diabetic admissions did decline in the inpatient data throughout the Beacon project. The non-intervention group seems to be declining as well, so it is hard to attribute this decline to the interventions.

EXHIBIT 12: EMERGENCY DEPARTMENT PQI 1: SHORT TERM COMPLICATIONS

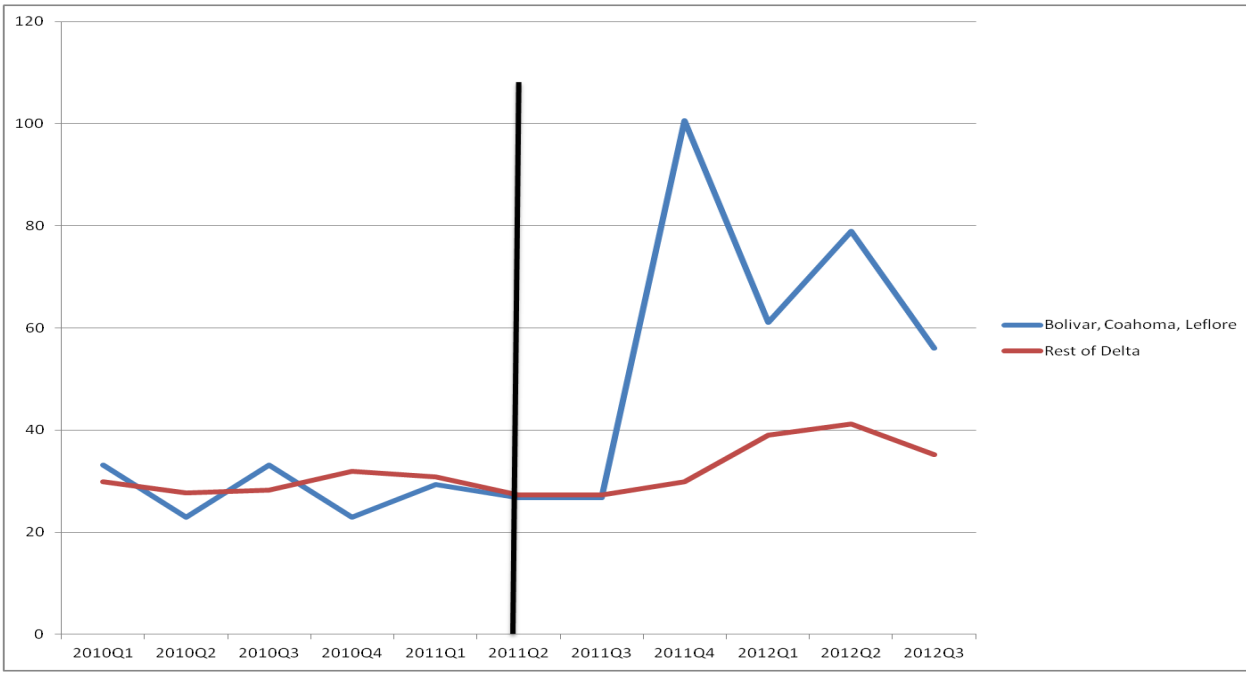
The emergency room data seems to be the biggest mystery. This graph shows where the concern in data collection methodology arises. The decline in patients with short-term complications in the emergency room appears to be quite drastic in both the intervention and non-intervention groups.

EXHIBIT 13: EMERGENCY DEPARTMENT PQI 3: LONG TERM COMPLICATIONS



Again, the opposite seems to be occurring with the long-term complications patients in the emergency room. There is a drastic rise in the numbers in the intervention group that is unexplained with the data.

EXHIBIT 14: EMERGENCY DEPARTMENT PQI 14: UNCONTROLLED ADMISSION RATE



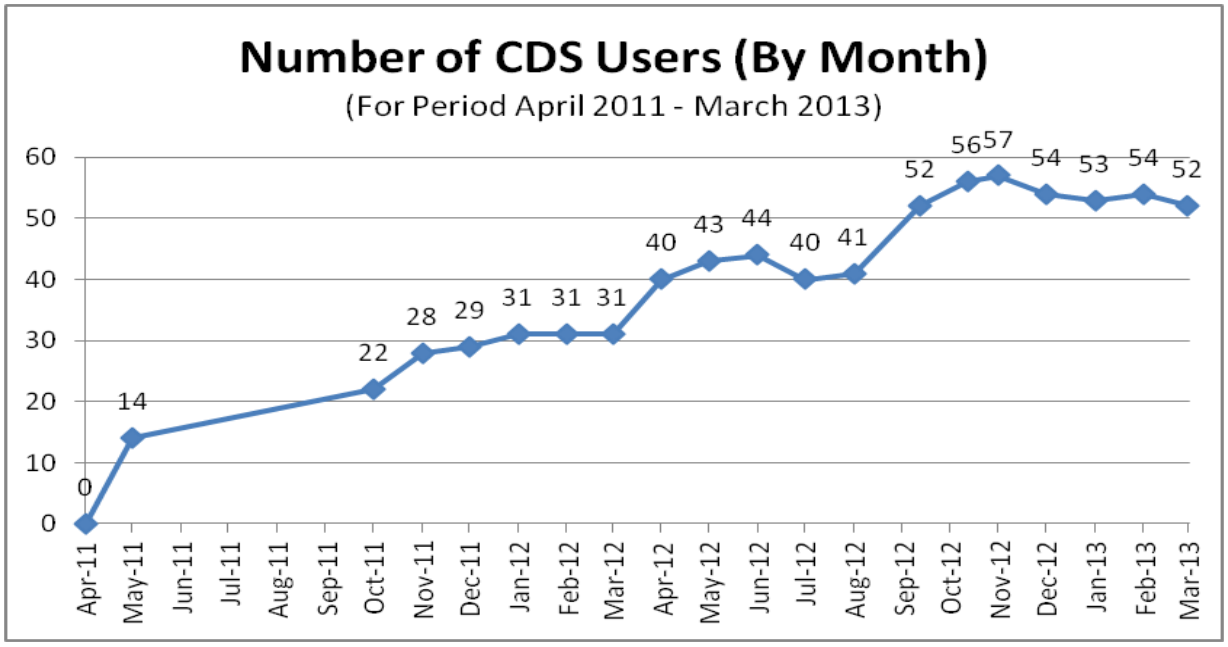
The uncontrolled population changes quite a bit across the timespan of the Beacon project in the emergency rooms, especially in the intervention group. The research team is still looking for further explanation in data collection methodology and hospital admissions.

IMPACT OF INTERVENTIONS AND INNOVATIONS

CLINICAL DECISION SUPPORT (CDS)

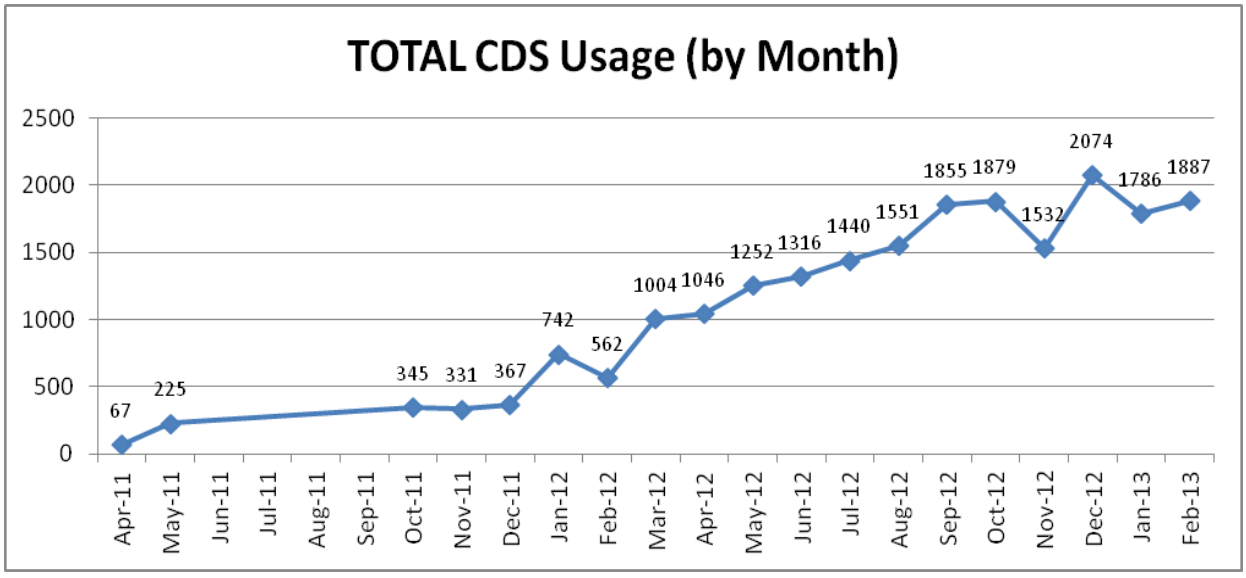
As of Dec. 30, 2012, CDS had been implemented in 28 clinics (comprised of 57 providers) more than doubling since January, 2012. Due to the loss of three clinics, 25 clinics (54 providers) currently use CDS. Recruitment and maintenance of CDS utilization performance is supported by education and re-education efforts. The number of clinics has more than doubled since December, 2011.

EXHIBIT 15: TOTAL CLINICS USING CDS (BY MONTH)



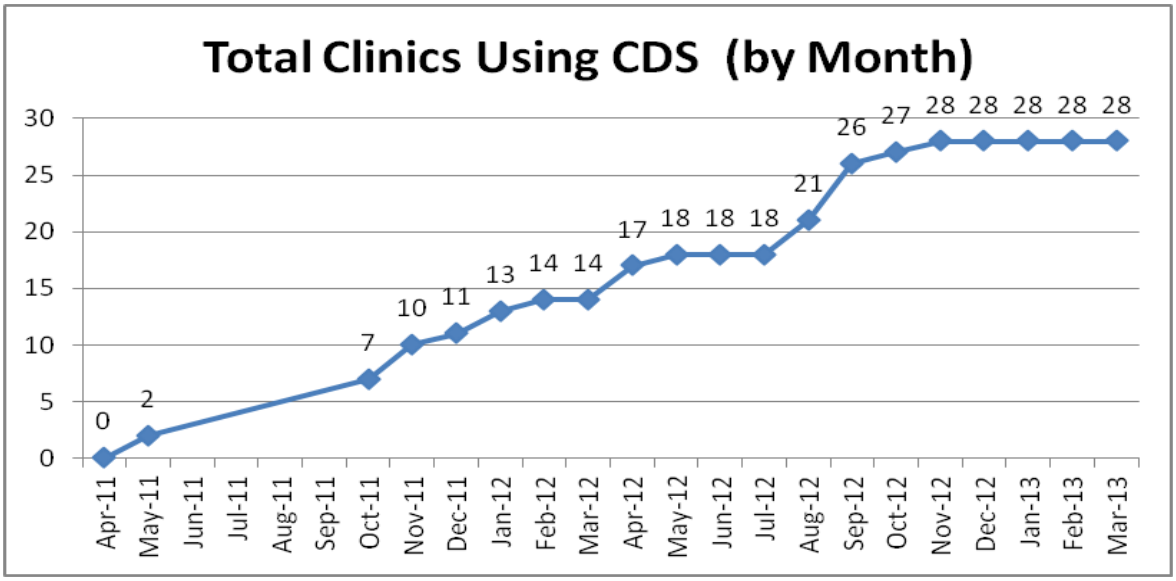
There are currently 28 sites using CDS to touch diabetic patients.

EXHIBIT 16: TOTAL CDS USAGE (BY MONTH)



Since January 2012, care guides (CDS) usage has increased fourfold from 367 to an average high of approximately 1850 monthly utilizations. This achievement is due to constant monitoring of CDS usage and continuous provider recruitment and re-education efforts. The CDS effort represents thousands of patients who are receiving better care and also have data flowing into the state HIE.

EXHIBIT 17: NUMBER OF CDS USERS (BY MONTH)



In March the DBB currently has 52 CDS users and will continue to add more as new lab interfaces are turned on.

CLINICAL TRANSFORMATION/PERFORMANCE IMPROVEMENT PROJECT

The Clinical Transformation BreakThrough Series (BTS) Diabetes Learning Collaborative continues in its efforts to assist practices in adopting the strategies necessary to improve diabetes outcomes, including reducing HbA1c, lowering blood pressure, improving cholesterol, and increasing diabetic eye exams and foot exams. This is being accomplished through an alliance of providers learning about improving standards of care, health outcomes and working toward the development of Patient-Centered Medical Homes (PCMH) while being supported by a Collaborative focused on diabetes care.

Cohort One – Initially, 11 providers were actively engaged in the Collaborative. Four providers withdrew due to various reasons, including: clinic closures and provider resignations. Currently, 7 providers remain actively engaged. They represent the following sites:

- Aaron E. Henry Community Health Center – 3 sites
- Indianola Family Medical Group – 1 site
- Jackson-Hinds Comprehensive Health Center – 1 site
- North Sunflower Rural Health Clinic – 1 site

Providers from these practices participated in a pre-work period which included the completion of an Assessment of Chronic Illness Care (ACIC) tool and attended the July 11-12, October 17-18, February 5 and March 20 learning sessions. Practices have also participated on monthly team calls and have submitted monthly narrative reports.

Collaborative Expansion – In September, the DBB expanded the Collaborative to embrace an additional cohort of providers. Initially, the DBB recruited 6 providers from multiple provider practices or practices associated with large healthcare systems. Four providers withdrew due to various reasons, including: provider resignations and increased clinical demands. Currently, 3 providers remain actively engaged. They represent the following sites:

- Mallory Community Health Center – 4 sites

A one-day learning session was held for these providers on September 26th to provide them with the foundational education Cohort One providers received in July. Cohort One and Cohort Two were merged during the October 17 and 18 learning session. Subsequent learning sessions were held on February 5 and March 20.

Objectives – The following objectives were defined in an effort to demonstrate the direct clinical impact of the Collaborative:

1. All providers in the Collaborative submitting written narratives on a monthly basis to detail successes and obstacles;
2. Number of providers increasing the percentage of diabetic patients who have received a foot check by 10% from baseline
   a. All Cohort One providers with AllScripts continue to increase the percentage of diabetic patients receiving foot exams. Table 1 below illustrates how the providers' individual efforts have impacted the entire clinic:

Table 1: Foot Exams

Site	6/1/2012	3/1/2013
AEH Batesville	3.96%	12.45%
AEH Clarksdale	8.18%	38.95%
AEH Tunica	2.08%	4.84%
Indianola Family Medical	4.31%	27.27%
Jackson-Hinds Vicksburg	17.28%	42.15%

3. All practices achieving improvement targets on at least two focus measures.
   a. All Cohort One providers with AllScripts have improved in two or more focus measures including foot exams (Table 1) and eye exams (Table 2).

Table 2: Eye Exams

Site	6/1/2012	3/1/2013
AEH Batesville	1.49%	29.79%
AEH Clarksdale	5.68%	22.40%
AEH Tunica	0.00%	0.81%
Indianola Family Medical	5.68%	22.40%
Jackson-Hinds Vicksburg	14.29%	25.26%

The 3 remaining Cohort Two providers have not had EHR/lab interfaces long enough for a proper data analysis. However, they have worked diligently to improve processes and the DBB anticipates being able to measure Cohort Two's improvement during the next quarter.

Our efforts to achieve these objectives for this quarter included the following:

- *Contract with Roger Chaufournier with CSI Solutions, Inc*. – The first learning session was held July 11 and 12 for Cohort One providers. On September 26, a one day learning session was held for Cohort Two providers. A second learning session for both Cohorts was held October 17 and 18. The final 2 sessions were held on February 5 and March 20. These learning sessions provided information to the engaged practices on topics ranging from maximizing the value of medical neighborhoods to evidence-based care.

- *Practice Coaches* – are assisting the practices in maintaining its change momentum, initiating monthly contact with the practices to discuss the practice's progress and providing feedback on the monthly narrative reports. In an effort to foster provider morale, the practices selected an initial aim with the greatest potential of producing immediate positive results. Each practice also received a practice toolkit consisting of the results of its initial ACIC assessment, examples of the Plan, Do, Study, Act (PDSA) Cycle and a process change sheet.

- *Data and Monthly Narrative Reports* –In addition to the assignment of a practice coach, practices participated in monthly team calls. These calls, along with the submission of monthly narrative reports, served as a regular forum for providers to share successes and lessons learned. These activities provided CSI Solutions, the practice coaches, and the project manager an opportunity to consistently assess each practice's compliance level, progress and provide feedback. Regular feedback and data discussions aided in motivating the providers to continue their efforts to either meet or exceed the objectives. The DBB's goal was to share data reports with the providers monthly as a means of allowing the DBB to engage in an open and regular conversation with the providers about whether or not they were on par with reaching or exceeding the objectives. For example, if a provider's monthly data report did not show an increase in foot checks, the DBB staff could intervene quickly to conduct a workflow evaluation and encourage them to conduct a Plan, Do, Study, Act (PDSA) Cycle. Data reports were not shared with the providers monthly; however, the DBB's constant internal review of the data did allow it an opportunity to identify EHR clinical usage issues and additional EHR training needs. These issues and needs were addressed with the providers throughout the quarter and during hands on reeducation sessions at the March 20 meeting.

Collaborative Impact – The participating providers have reported positive changes in their approach to patient care. Many have advised that they are moving away from a "treat the chief complaint" mold to treating the whole person through a quality-driven standard of care. The providers engaged in the Collaborative who are members of a multiple provider practice have developed the skills and confidence to spread change throughout the practice. These newfound skills and confidence will improve diabetes outcomes throughout the practice and eventually throughout the Delta. The DBB will continue to actively

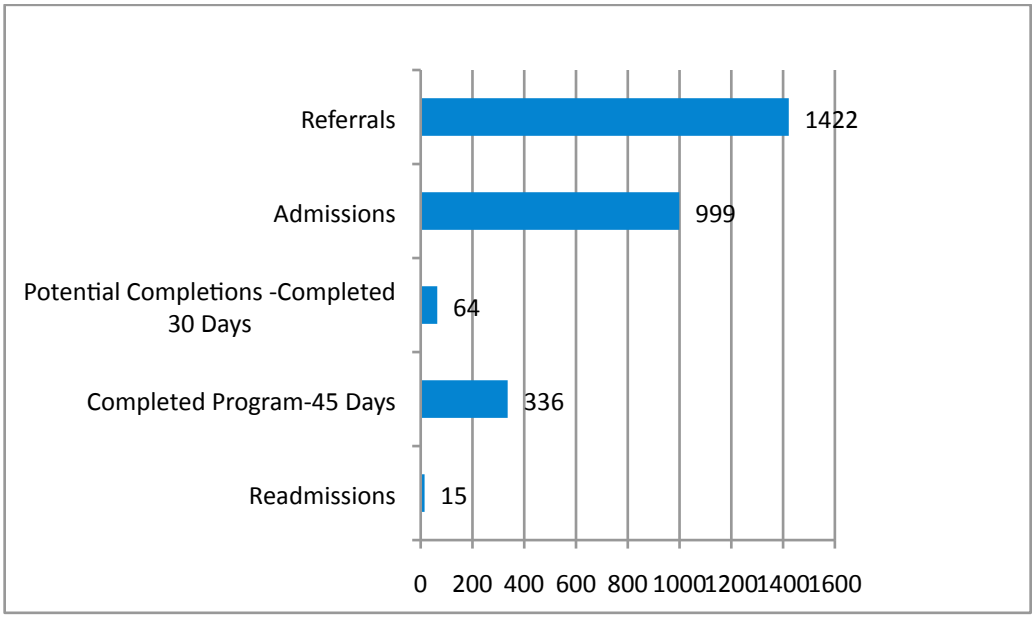
engage the providers in maintaining their individual change momentum and will aid the clinics in developing an organizational spread plan of action.

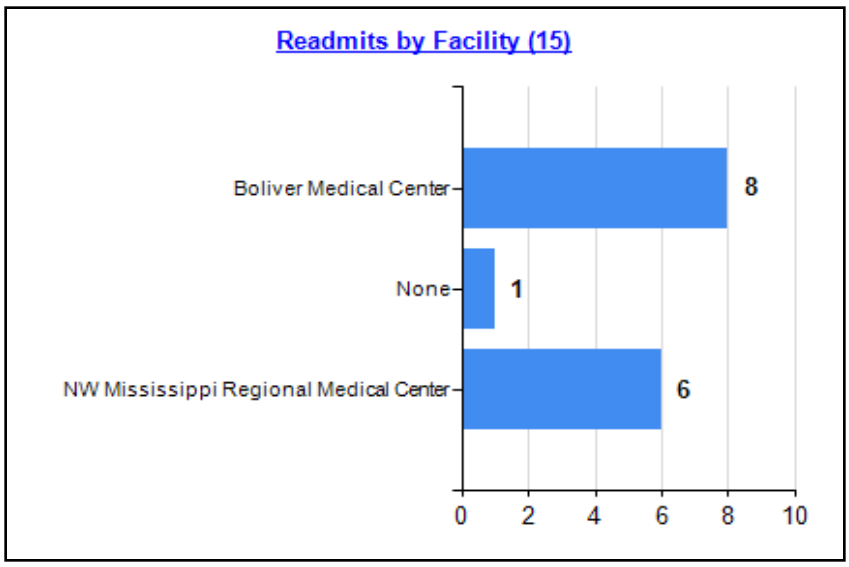
CARE TRANSITIONS

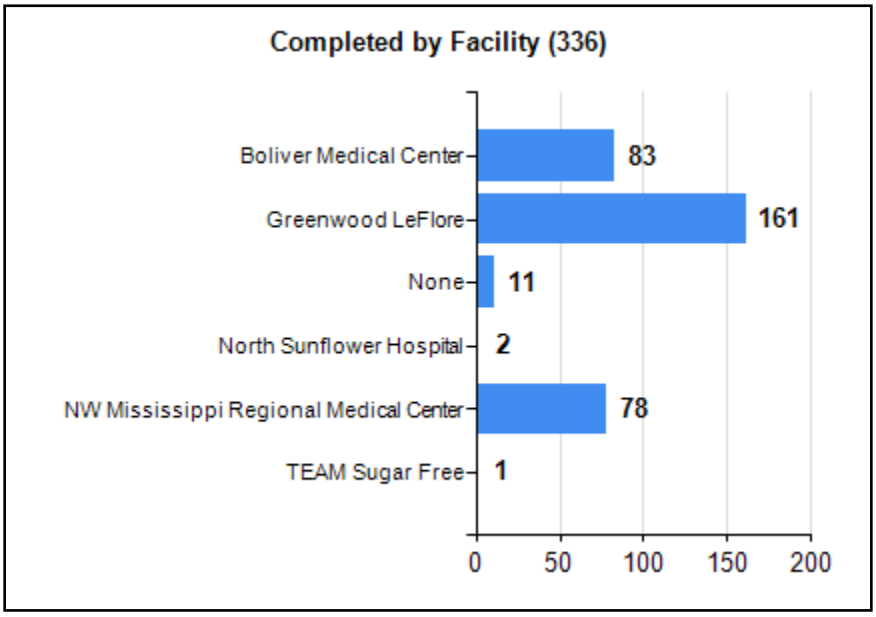
As a pilot project, the Care Transitions project was fully implemented at Northwest Regional Medical Center, Bolivar Medical Center, and Greenwood-Leflore Medical Center, and was offered on a part-time basis to North Sunflower Medical Center. Each hospital demonstrated a number of different needs. For example, Bolivar Medical Center had a large number of dialysis and nursing home patients. Northwest Regional Medical Center continuously admitted a large number of diabetic patients with co-morbid conditions. Greenwood-Leflore had a large number of congestive heart failure patients and did not have a need to tailor the program to diabetes patients. In order to meet the need of each hospital and meet enrollment requirements, DBB, in agreement with ONC, allowed the hospitals to change the admission criteria to suit their re-admission requirements.

As of March 31, DBB Health Coaches completed enrolling patients, and will finalize the coaching process through April. A final description of the project will be included in the DBB final report, along with a summary report from the University of Illinois, Chicago. As indicated in the graphs below, Greenwood Leflore demonstrated the most success with the project, with 161 patients completing the program between December 2011 and March 2013, and experiencing no readmissions. This hospital has hired a part-time health coach to continue care transitions at their hospital at the end of Beacon funding. Bolivar Medical Center and Northwest MS Regional Medical Center declined to continue the project due to lack of funding, and DBB has provided information on resources available for care transitions through the state QIO and other Beacon partners for future support.

EXHIBIT 18: PERFORMANCE METRICS FOR CARE TRANSITIONS







Care Transitions Success Stories

Story 1: A Health Coach

One health coach reported, "I had a patient who did not have any family and was having a hard time keeping her appointments because of lack of transportation. The health coach talked with the hospital social worker and together they were able to find her free transportation. The patient was so pleased to hear about this and has kept every doctor appointment since that time because she now has reliable transportation. She has not been readmitted to the hospital."

Story 2: A Care Transitions Patient

The patient is a 53 year old African American female with the diagnosis of hypertension and diabetes. During her hospital stay the health coach began discussing the relationship between weight, high blood pressure and diabetes. The patient was not aware the weight could impact her other chronic conditions so much. Once she went home the coach re-enforced the diet she should follow. I talked to her about the foods that would be beneficial to help her condition along with the portion of foods that she should eat. The patient was already taking her medication, so she was encouraged to continue with that because of the importance of taking her medication and being consistent in taking her meds along with exercising.

The patient had not exercised in the past and the coach instructed her that exercising could be something as simple as taking a walk every day or twice a day if she was up to it, sitting in a chair or/and lying in bed doing exercises like leg lifts or stretching her arms. From these discussions, the patient also started walking daily.

The coach gave her the support and encouragement that she needed to initiate good health habits. As a result the patient was successful in beginning the process of weight loss and better self management of her chronic conditions. On the 45-day follow-up call, the patient stated, "I have lost weight and I continue to exercise. I want to be here for as long as I can." The patient has not been back to the hospital.

MEDICATION THERAPY MANAGEMENT (MTM)

This quarter, the UM School of Pharmacy continued to provide MTM in nine clinics, focusing on patient follow up. Activities surrounded further integration into the clinics as members of the treatment team, following up with patients to adhere to best practices for routine/preventive screening, and resolution of drug therapy problems (DTPs). Recruitment efforts were ongoing and North Sunflower Clinic saw the biggest addition of new patients this quarter with 23 patients. This clinic is featured in the success story described below due to the collective impact of integrating the pharmacist with the treatment team, electronic medical records, and workflow quickly.

Process Measures continued to be tracked weekly and delivered to DHA. These measures are simply an indicator of the volume of work completed by the pharmacist in each clinic.

Beacon Quarterly Report– UM School of Pharmacy
Cumulative Process Report as of 03/31/13

Total Number of Patients, All Clinics = 309

Beacon Category	Description	Location	Person Responsible	Status
Clinical Transformation	Continue existing services 2-3 days a week	IFMG, Indianola, MS	Sarah Prather	***Current enrollment: 125***
	Decrease existing services to 1 day a week	Dr. Burnett, Yazoo City, MS	Lorelei Farr	***Current enrollment: 39***
	Expand MTM with Pharmacist services 2 -3 days a week.	North Sunflower Medical Clinic, Ruleville, MS	Sarah Prather	***Current enrollment: 54***
	Expand MTM with Pharmacist services 2	Campbell Clinic - Pam Wilson, CFNP,	Jane Cross	***Current Enrollment:***

	days a week.	Clarksdale, MS		***15***
	Expand MTM with Pharmacist services 1 day a week.	Jackson Hinds – Vicksburg	Lorelei Farr	***Current Enrollment: 23***
	Expand MTM with Pharmacist services 2 days a week.	Dr. Kellough, Clarksdale, MS	Jane Cross	***Current Enrollment: 23***
	Expand MTM with Pharmacist services 1 day a week.	GAC Yazoo City	Lorelei Farr	***Current enrollment: 13***
	Expand MTM with Pharmacist services 1 day a week.	AEH Batesville	Rebecca Taylor	***Current Enrollment: 6***
	Expand MTM with Pharmacist services 1 day a week.	AEH Clarksdale	Jane Cross	***Current Enrollment: 11***

Notable outcome results include statistically significant improvements (baseline vs. most recent value) for hemoglobin A1c, systolic and diastolic blood pressure, total cholesterol, and LDL-cholesterol. Two hundred two (202) individual drug therapy problems were identified and resolved by the pharmacist on 98 patients (average of 2.1 DTPs per patient) during the January to March quarter. The two milestones set for this quarter were achieved as evidenced by the table below.

Milestone	Goal	Result
Goal #1: Demonstrate at least a 10% relative reduction in HbA1C values in at least 50% of patients with an initial HbA1C greater than 9%	≥ 50% of patients	**67.3% of patients**
Goal #2: Demonstrate at least a 5% relative reduction in HbA1C values in at least 50% of patients with an initial HbA1C less than or equal to 9%	≥ 50% of patients	**51.3% of patients**

See Attachment C: Cumulative MTM Results for a more expansive evaluation of the project.

MTM Success Stories

Clinic Success Story – North Sunflower Medical Clinic

Each time expansion to a new location occurs, it is hard to determine to what extent and how quickly the pharmacist will be trusted and utilized. The UM School of Pharmacy experienced great success integrating a pharmacist into the North Sunflower Medical Center Clinic in Ruleville, Mississippi. This clinic is particularly unique because it is open 8am until midnight, 365 days a year, and may be utilized as a walk-in clinic in addition to regular primary care clinic. Due to these extended hours, there are many providers that cycle through the clinic every week. One challenge that was predicted with this location was gaining referrals from providers that work during evening and weekend hours. After only a few weeks, Dr. Adelo Aquino, North Sunflower Clinic's medical director, agreed to enter into a collaborative practice agreement with the pharmacist, so that she is able to adjust and initiate medications, as well as, order follow-up laboratory tests, such as HbA1cs. This allows for a much more efficient workflow in clinic, and does not require every provider or nurse practitioner to have an agreement with

the pharmacist. After speaking with some of the providers, the UM SOP was also able set up an easy referral system using the EHR's message system. This allowed for a standard, electronically enabled communication platform that improved efficiency. The result of these work flow changes also fostered relationship trust and improved communication. Many of the providers now refer to the pharmacist for medication management, and we have seen a steady increase in the number of provider referrals. Since starting at the North Sunflower Clinic, the pharmacist has seen 54 individual patients. She was able to set up a schedule through the clinic's practice management software and document her encounters in the EHR.

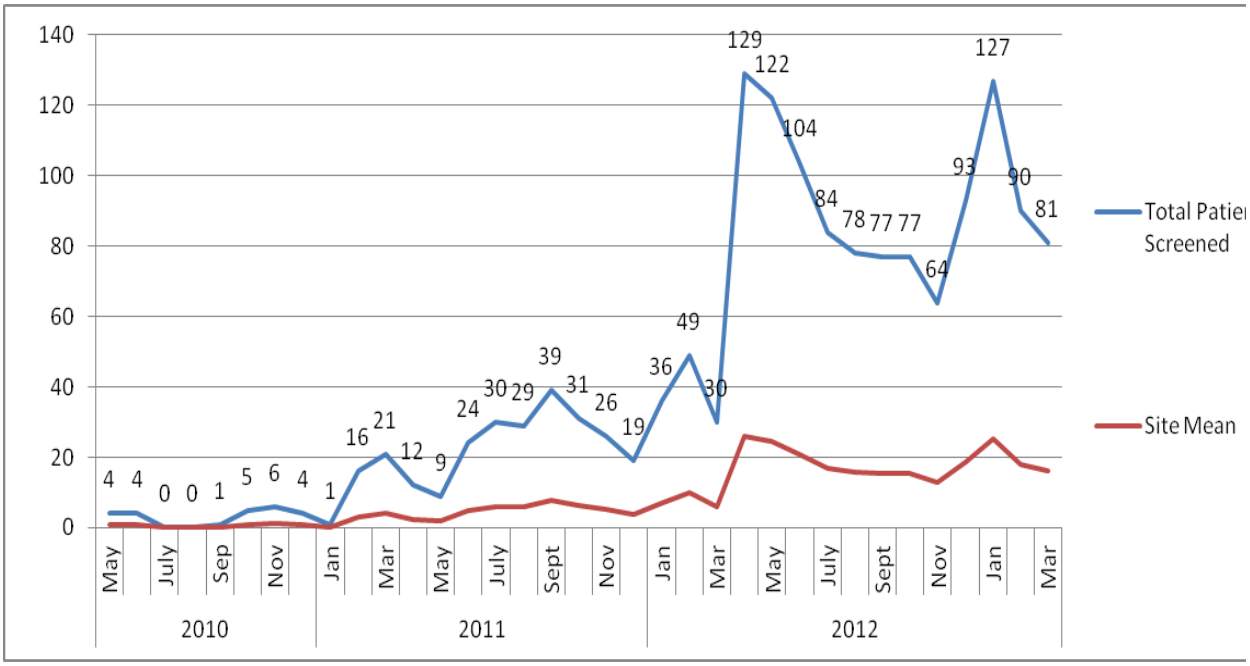
Patient Success Story – Indianola Family Medical Clinic

JL was first seen for MTM on 1/24/12 following his diagnosis of T2DM (Type 2 Diabetes Mellitus) in December 2011. At the time of his diagnosis and first MTM visit, his HbA1c was >14%. After one MTM visit and starting metformin and glimepiride, his HbA1c improved to 10.3%. We had a very long first MTM visit, and I counseled him on the basics on what diabetes is, self-care management goals, SMBG monitoring and goals, HbA1c, diet, and exercise. His third HbA1c following diagnosis improved to 6%. I recently had a follow up visit with him and since our last visit his HbA1cs have been 5.9%, 6.1%, and 6.2%. He is exercising (walking) 3 times per week and following a much healthier diet that his sister helps him prepare. He is currently still on metformin and glimepiride and is now also taking Januvia. In addition to his diabetes improving, his cholesterol has improved too. His LDL at baseline was 104 mg/dL, and, most recently, it was 76 mg/dL. He is also up-to-date on all of his labs and screenings and understands the need to continue to monitor his health closely. JL states that he feels “great” and that he plans to “live to be 100”!

DIABETIC RETINOPATHY SCREENING CAMERAS

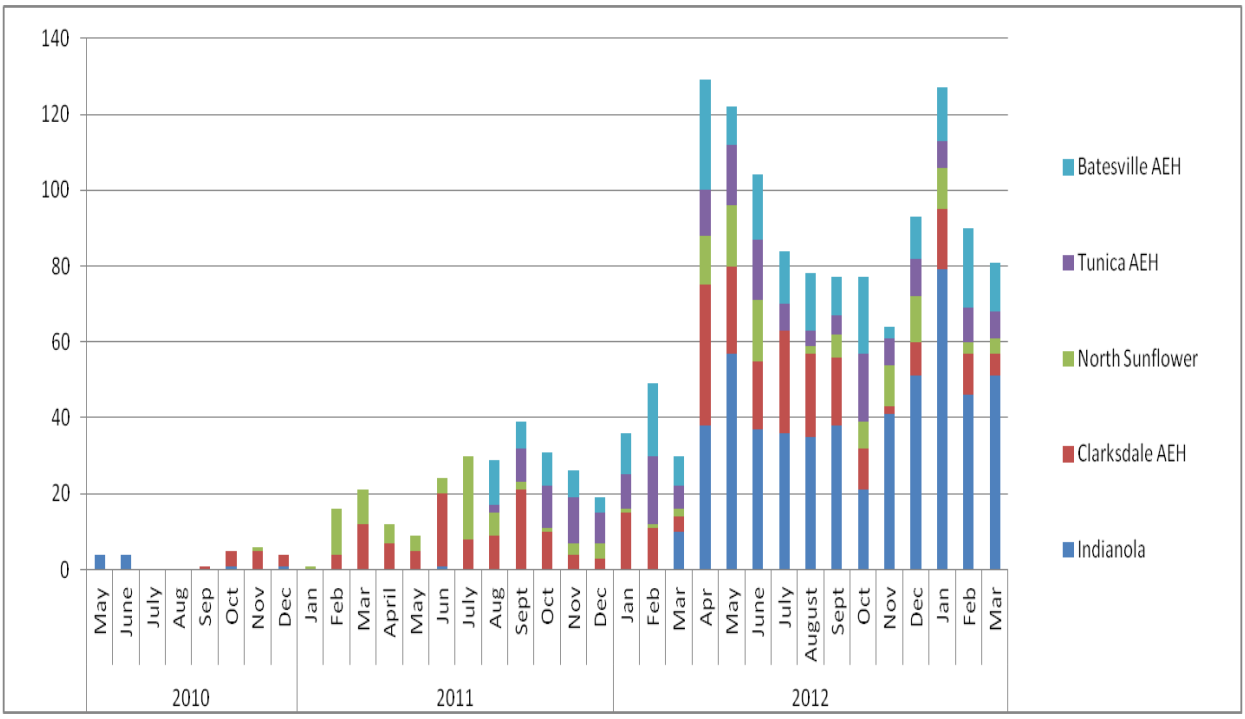
During Q1, Delta Health Alliance has continued to optimize staff at the five current locations. We initiated an MOA with Jackson-Hinds, Vicksburg to install the sixth camera, but they have not returned the MOA to date, despite many attempts on our part to obtain the signed MOA and install the camera. Weekly numbers fluctuate depending on the presence of DHA screening staff (staff may be off due to illness, vacation, or clinic closings), and clinic adherence to workflow. While some fluctuation is currently unavoidable, we are working to train clinic staff on the DR program, as well as improve adherence to workflow, resulting in an increase in overall screenings per site.

EXHIBIT 19: NUMBER OF EYE SCREENINGS CONDUCTED SINCE IMPLEMENTATION



Our greatest number of screenings occurred this quarter at 127 in January. The DBB has not been able to maintain that number of screenings on a monthly basis; however our monthly screening rate is much higher than the mean trend overall. The exhibit below depicts positive trend in the number of screenings since early implementation efforts began in 2010, and demonstrates the improvement since Beacon involvement began in August 2011. The Beacon funded DR Technician began imaging in clinics in August 2011, providing consistent quality image improvement and training capabilities. Prior to this date, many images submitted were of sub-par quality and did not pass quality assurance.

EXHIBIT 20: NUMBER OF EYE SCREENINGS PER SITE SINCE IMPLEMENTATION



DHA is working closely with Hubble Telemedical to identify long-term sustainability plans, including identifying payer sources and billing codes for Medicare and Medicaid. Over the next six months, DHA will continue training clinic staff to conduct DR screenings and manage work-flows efficiently within the EHR.

HEALTH INFORMATION TECHNOLOGY (HIT) ACHIEVEMENTS

INFRASTRUCTURE AND BROADBAND

The Infrastructure and broadband project was brought to a close during Q1. All sites being covered by Beacon have been transitioned to their own network or have taken over the financial responsibility for the data circuits that were provided by DHA through Beacon. In additional, we have started an additional project to implement Allscripts using Citrix in a virtual environment in order to significantly reduce the bandwidth needed to deliver the application. Due to the high cost of bandwidth in the MS Delta, this will enable the lowering of the soft costs for the clinics to maintain the usage of the hosted EHR system.

NEW EHR IMPLEMENTATIONS

No new clinics were brought online during Q1. The DBB did, however, implement new providers at existing clinics in all aspects of the EHR including the EHR, Care Guides, lab results, etc. Our focus for this quarter was preparing a streamlined deployment of EHR for the clients to make it easier to support, as well as implementing the sustainability model for ongoing support of the EHR.

EHR UTILIZATION

Workflow assessments to improve clinic workflows and EHR utilization were completed in all DBB sites this past fiscal year. Re-education efforts were also completed with all DBB providers and are ongoing. The most common issue DBB has found during the re-education process is that users were not utilizing the EHR in a way that maximized its capabilities. Instead, many were using it simply as a way to record patient information. During our sessions, DBB staff has educated users on how to use the EHR as a tool to better serve their patients. One way to do this is by using call processing, which creates a log of all calls, by patient. Another is by using work lists which help prevent missed documentation on medication administration, simplify lab verification, and aid in scheduling follow-up appointments and referrals. A third example is using reminders and recurring orders when ordering any item which will need to be repeated. By making this change, the EHR will notify the clinical staff and provider when a patient is due for an order.

In the re-education sessions, the DBB team reviews the basics of using Allscripts, with a focus on the addition of features not currently being used as well as tips learned through research and experience. For the non-clinical and clinical users, the sessions are formal classes with a demonstration of the principles projected on a wall or screen in the clinic. Users are provided a guide at the beginning of each session and have the opportunity to ask questions during and after the class. The providers are re-educated in one-on-one sessions with a registered nurse. All of the sessions have been well-received, and without exception the users have indicated they learned something they would use to better utilize the EHR. A new tracking system has been implemented with clinical analysts to ensure prompt response to provider questions and concerns.

The DBB has also resolved all issues with the CQM reports with Allscripts, and providers on our network are now able to send data to CMS.

- The DBB engaged in a massive project to increase data collection through a complete redesign of all databases to a more standard deployment. This process is very resource intensive and will take additional quarters, but will allow training to be standardized and data quality to be guaranteed.
- Re-education has continued across the board to emphasize the MU portions and CDS portions of the system.
- Continued development of options for providers to increase their level of codified data documentation and move away from free text.

LAB INTERFACING

DBB made great strides and overcame many obstacles this quarter by implementing all remaining lab interfaces this year that had not been previously completed in prior years. . The DBB expects the results of these efforts to become relevant in our 2012 clinical outcomes. This was a major accomplishment for DBB. These implementations affect the overall outcomes of many other DBB goals such as, clinical decision support deployment, meaningful use, care transitions, etc. As evidenced in the

Q3 and continuing in Q4, the availability of lab data has dramatically contributed to the quality of patient outcome data that DBB is able to extract.

- Continued to improve performance of lab interfaces; increased inbound information from DRMC to its owned and affiliated clinics.

IMMUNIZATION REGISTRY INTERFACE

Immunization registry interfaces were completed for a cumulative count of 24 primary care sites by the end of December 2012, representing 60 providers. Completion of the Immunization Registry has been a major DBB accomplishment for this year. DBB encountered multiple barriers to implementation, stemming from clinical data entry to third-party hardware related issues. The process for the Vaccinations for Children (VFC) locations is much more intense and requires a minimum of 30 days of validation testing (Parallel Production). The validation period is closely monitored by the Mississippi State Department of Health and requires DBB staff to react immediately if and when an issue is detected. The non-VFC sites are less intensive but do depend on DBB training personnel to assist in the initial immunization interface set up. Because of these efforts all immunization data for these providers will now be flowing to the state registry on a daily basis and will enable providers to meet this criterion for the electronic exchange of information measure for Meaningful Use.

QTR	VFC Locations	Non-VFC Locations	Total Number Providers
3	Jackson Hinds Vicksburg DRMC Family Care Greenville DRMC Children's Clinic Greenville DRMC Pediatrics Greenville DRMC Rural Health Greenville	21st Good Samaritan, Greenville Andrea Smith Clarksdale DRMC Jackson Greenville DRMC Richardson Greenville Mallory Greenwood	14
4	Indianola Family Indianola Aaron Henry Clarksdale Aaron Henry Batesville Aaron Henry Tunica Mallory Durant Mallory Lexington Mallory Tchula Greenwood Comprehensive	DRMC James Beckham DRMC Pabbathi Greenville Berryhill Clarksdale Kellough Clarksdale Trinca Greenville Yazoo Family (Burnett)/ Yazoo City	46

The DBB continued to monitor the Q4 clinics for compliance and had some issues that required continued inventory monitoring in the parallel production. Mallory Tchula dropped from the program as they are no longer providing immunizations at the clinic. Met with the state weekly to provide status and continued to train participating providers and staff on the process. We continued to update the systems with inventory information and background data to keep the process working.

HEALTH INFORMATION EXCHANGE (HIE) ACHIEVEMENTS

Thirty-three clinics went live on the state HIE at the end of June, 2012. There are currently 205 active users, which includes all providers and not just primary care. Forty-three (43) providers (representing 17 clinics) have logged into the HIE to get patient information. In addition, the clinics were trained on the use of the MS-HIN platform and also were provided access to the Direct Messaging software and program.

For the milestone related to bringing the Phase 1a clinics to completion, all were completed by the end of Q3 with the exception of the Yazoo Family Doctors due to issues with logins to the certification environment. There was an issue with the MS-HIN certification environment during this period that caused the final certification of the data feeds and the move to production to not occur until October 2, 2012. Also during Q3, two lab interfaces (Quest Labs Results and Harvest Lab Results.) were completed.

For the inpatient part of the project, four hospitals worked through some level of engagement with MS-HIN through DBB, including the signup process through the submission of interface data to Medicity, the HIE provider. One hospital (Greenwood Leflore) went into live production in November, and one (South Sunflower Medical Center) is on track to go live in early January, 2013.

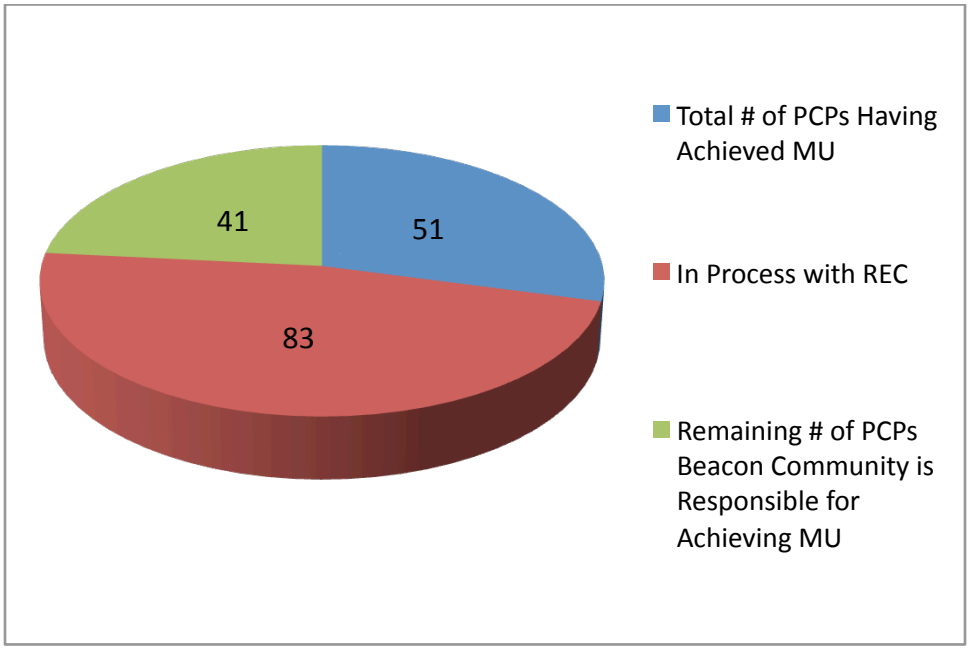
- In the HIE, the DBB brought three hospitals live – S. Sunflower Medical Center, Delta Regional Medical Center and N. Sunflower Medical Center. (ADT Only)
- Worked on utilization by providing additional training sessions at the learning collaborative as well as 3 web sessions to all participating providers

MEANINGFUL USE ACHIEVEMENT

There are currently a total of 291 primary care providers in the DBB 10-county catchment area. To reach our 60% goal, 175 primary care providers must attest for Stage 1 meaningful use with the Centers for Medicare and Medicaid Services. As of April 15, 2013, 51 providers have achieved Meaningful Use Stage 1. An additional 83 providers are in process with the Regional Extension Center, eQHealth. The DBB is now responsible for assisting 41 additional providers in meeting Meaningful Use.

EXHIBIT 21: MEANINGFUL USE ACHIEVEMENT AS OF APRIL 15, 2013

Goal: 175 Providers to Attest to Meaningful Use to meet 60% Goal



COMMUNICATIONS

DBB communications activities for this year include the continued weekly airing of the DHA Beacon Health Minute on WABG TV (Greenville) during the Tuesday 6:00 p.m. newscast, with a repeat of the airing on Wednesday morning during the "Good Morning, Mississippi" show. Each airing reaches a viewing audience of 215,000 people of the Delta region. The DBB Health Minute has been promoted through 688 commercials on the ABC, FOX, and NBC networks through WABG. Throughout the year, Alan Jay Cohen, MD, F.A.C.E., addressed diabetes self-management in a total of 13 different segments. Beverly Johnson, Project Director for Tobacco Cessation, addressed the negative effects of smoking on patients having diabetes. Leigh Ann Ross, Pham D, Associate Dean for Clinical Affairs University of Mississippi Medical Center addressed medication adherence in 5 segments. Lakeisha Richardson, MD, focused on women's health issues. Other noted health care advocates shared tips for Mississippi residents to achieve better heath.

Television coverage from two stations WXVT (132,000 viewing population) and WABG (215,000 viewing population) focused on the Diabetes Learning Collaborative meeting held July 11 and 12. Interviews were conducted with Kimberly Massey, DBB Project Director and local physicians. The Delta Democrat Times newspaper (8,500 print circulation plus online subscriptions) also provided coverage of the initial Learning Collaborative meeting in Greenville on July 11.

A social media campaign using Twitter, Facebook ads, and Google ads was conducted throughout the year highlighting the Beacon 2nd Anniversary, Diabetes Learning Collaborative, and TEAM Sugar

Free with links to the DHA website and YouTube. Facebook ads were targeted to specific counties in which TEAM Sugar Free conducts Diabetes U classes. In addition to highlighting Beacon through social media, DHA placed four ads (May, June, July, and December 2012) in the Delta Business Journal which has a circulation of 12,000 readers.

To solicit providers to become part of the Diabetes Learning Collaborative, the communications team prepared 90 informational packets with information about the DBB, including highlighting Beacon milestones and components of the project. Dr. Bobby Dale, DHA Chief Medical Officer and Vice President of Medical Affairs, and Rhonda Allen, Physician Liaison visited Delta providers for enrollment in the performance improvement project.

During the 3rd quarter, Jobyna Hazzard, Communications Manager, along with Bobby Dale, MD & Chief Medical Officer and Shad Williams, CEO, SergeMD Healthcare Solutions visited clinics and providers in six locations to gather information in order to create a sustainability plan for EHR and to promote utilization of the Help Desk which was created during this reporting period. The Help Desk has been most effective in maximizing customer service to providers experiencing technical issues or in need of more training to efficiently utilize the EHR.

Through Communications, Jobyna Hazzard has transitioned into a Physician/ Client Advocate and is conducting regular phone or in-person visits to ensure that locations are using the EHR to optimum levels and to ensure that locations are achieving targets.

PARTNERSHIP WITH MISSISSIPPI STATE MEDICAL ASSOCIATION

The Mississippi State Medical Association continues to partner with the Delta Blues Beacon to get the message out about the DBB, as well as assist with tailoring this message. Eighteen providers met individually with staff of MSMA to hear the great work that has taken place through the DBB as well as learn about upcoming opportunities for taking part in the Beacon community. These meetings were also an opportunity for MSMA to personally deliver the message of meaningful use and its impact on the Delta region's primary care providers and the benefits that will come as a result. MSMA also represented the DBB at four HIE meetings and coordinated online messages to publicize the activities of the DBB to providers that receive electronic publications as a member of the MSMA listserv. Two hundred (200) primary care providers from the Delta participate in this listserv.

EXHIBIT 22: MISSISSIPPI STATE MEDICAL ASSOCIATION ACTIVITIES

Publications: *All publications are also available on the website	Journal	800 600	4 9	Mailed Monthly – 200 Delta Members * 4 journals = **800 contacts** ; 9 journals = **5,600 contacts**(2 articles in month of May),
	Vitals article	200	1	1 vitals article written this year
	Email Newsletter	152	4	Beacon was a topic of 6 articles and 12 ads this year. Email newsletters during 2012; 152 members * 6 articles and 16 ads **= 3,344 contacts**
	Beacon Email Blast	152	3	**456 contacts**
	Delta Business Journal	12,000	2	3 ad placements in DBJ in 1st and 4th quarters. 12,000 * 3 ads = **36,000 contacts**
	Postcards for Anniversary event	200	2	One mailing for promotion of event * 2 times = **400 contacts**
	EHR Help Desk email blast	152	1	**152 contacts**
	MSMA Directory	200	1	Ad in MSMA's annual physician directory; **200 contacts**
	Website Ad	n/a	1	Website ad appeared daily on MSMA homepage beginning in September
	Social Media mention		1	Directed the attention of **490 s**ocial media followers on Facebook and Twitter to Beacon info

SUSTAINABILITY AND FUTURE ENDEAVORS

As of December 2012, Delta Health Alliance has installed Allscripts Enterprise EHR software and appropriate hardware for a current count of 167 providers in the Mississippi Delta and Hinds County, of which 57 are Beacon providers in the DBB 10 county catchment area. Delta Health Alliance has provided database and server hosting, application support, and client management- a full array of services

that has always and will continue to include upgrade management, training, and troubleshooting. These services will be provided on a per-provider, subscription basis. Going forward, to achieve sustainability for the electronic health records project, customers will have the fore-mentioned services and additional via a-la-carte/fee services.

At this point, 98 of 143 providers have signed Memorandums of Agreement to continue services. The team has adjusted the service levels for each provider based on their needs and our ability to deliver. The overall response from the providers has been very encouraging. The terms are different length, depending on comfort. Some clients are looking to consolidate to a system that is on one database from what they are currently using for their PM and EHR (example, Jackson Hinds is moving to eClinicalWorks later this year). However, the DBB is working towards implementing new clinics and are working with Allscripts to partner on getting the remaining inventory of licenses deployed across MS.

The DBB team is also monitoring meaningful use attestation and daily re-education on the HIT capabilities of the EHR system to ensure that providers receive all of the technical assistance that they need. New HIT capabilities, such as the Allscripts Population Health Tool, are being researched and tested to ensure that providers are able to get the most for their dollar as they invest in this system and the interventions offered. These additional features within the EHR would allow the DBB team to make provider-level data available and would give providers the ability to see improvements at their level within each practice.

Interventions will have to be sustained in the future on a site-by-site basis. No response has been received from Medicaid on what additional services would be reimbursed. However, the team will continue to look for supplemental funds to keep projects operational as long as possible. Currently, Medication Therapy Management, Diabetic Retinopathy Cameras, Community Health Worker and the work of the Learning Collaborative will continue into the fall of 2013. As of March 31, 2013, the DBB discontinued funding and operation of the Care Transitions intervention.

ATTACHMENTS

(Submitted as Separate Files)

A. DELTA BLUES BEACON PERFORMANCE METRICS TEMPLATE
B. DBB NON-KEY MEASURES
C. MTM CUMULATIVE RESULTS