

Cover Page



Core Item: Technology and Patient Engagement

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Horizon Family Medical Group

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Executive Summary

Horizon Family Medical Group made the switch to a new EMR, EclinicalWorks in 2012 with the goal to improve its overall patient care and to adopt a new focus from reactive to preventative medicine. New workflows lead to improvements in provider and patient interaction. With all the new technology and new tools, HFMG determined its providers were spending more time in front of their laptops/computers and less time interacting with patients. Speaking to their peers, many physicians were struggling to find a balance with the information and tools available while seeing the patient. Patients 65 and older seemed to realize a lack of communication with their provider compared to the younger population. HFMG's goal was to improve patient engagement with the intention of enhancing patient care and outcomes. Many other groups were turning to

transcription companies to relieve their physicians with the hope that it would help them engage the patients more. HFMG physicians and management considered multiple solutions and decided to keep the technology in house. In turn, the IT department built a solution that communicated with the EMR, using built in tools and constructing templates, favorites and order sets to give initial relief. To keep the goal manageable and realistic, management and IT determined that reducing just 30 seconds from 6 to 8 workflows could save providers three to four minutes per visit. That would add three to four additional minutes of eye contact with each patient, which the physicians consider substantial when it comes to counseling the patient on their diagnosis.

Background

Established in 1999, Horizon Family Medical Group began with four locations and ten Providers. Its CEO, James Olver, held a vision for HFMG to help the community achieve healthier outcomes and educate patients on self-management so they may learn to live a happier, healthier life. Since then, HFMG has grown to over 100 Physicians and 40 locations, comprising of 17 different specialties. With multiple locations across the Hudson Valley, it was a challenge to share data between multiple sites utilizing paper charts. In 2008, HFMG implemented the EMR vendor Prognosis, becoming one of the first few organizations to adopt an EMR within the community. Prognosis helped its physicians share data seamlessly across multiple locations to help achieve better overall care for patients. HFMG had the ability to track patient outcomes by running reports, improve efficiency in regards to patient outreach initiatives, and improve collaboration between Providers. In 2011, as it was becoming increasingly necessary to track outcomes, there arose the need for a higher sophistication in reporting. In order to take the next step, HFMG started researching a new EMR that could provide tools that would continually grow with Horizon in the future. HFMG signed with EclinicalWorks to help improve overall care and provide the tools needed to take the next step in overall efficiency. In 2015, HFMG was recognized by NCQA for its consistency in practice management quality, continual patient satisfaction, programs to help reduce cost and yearly improvements in patient outcomes. HFMG was awarded PCMH Level 3 across all of their 15 Primary Care sites.

Local Problem

On average HFMG's provider slots range between 15 minutes to 20 minutes, depending on the visit type. As a result, the provider is limited to the time he/she has to review patient concerns, documentation, review tests with the patient, and answer any questions. With constant workflow improvements, our staff was efficiently able to accomplish all tasks for the patients in the given time; however, providers wanted to spend more time talking to the patients. Passion to help the community and the level of care they want to achieve for their patients was commendable, so management dedicated weekly IT time to meet with each provider to help them increase the time spent with patients.

First, IT worked with providers to determine the setup of the patient rooms. For example, how should the computers be placed to ensure providers are always facing the patient. HFMG reviewed all offices that were viewed as needing the biggest improvements. Next, HFMG worked on creating custom templates and order sets for each provider, to allow them to spend more time with the patient and less time documenting. The reason we spent countless months and continue

to do so individually with each provider is because it is very important the providers continue to do comprehensive documentation on their visits. Patient care would be drastically impacted if we did not continue to stress the importance of thorough documentation and the only way to be successful in our goal was to not change their level of documentation as a tradeoff to save a little time. To ensure this was not the case we have our own billing department and hired a consulting group who specializes in medical documentation. This allowed us to assure we were not trading quality for time. The IT Team also realized providers spent countless hours ordering the same tests for multiple patients and queried each test over and over. The process was made more efficient using the combination of creating favorites and order sets. This process required meeting individually with each provider creating individual favorites and order sets for labs, diagnostic imaging tests, medications, referrals, procedures, and patient education. The hope is the provider would not query 90% of the tests, medications, and procedures they ordered on a daily basis. The practice resulted in saved time, while maintaining the quality of patient care. During observation we also realized that providers were taking, on average, three minutes to conduct a full overview on any outstanding tests, new test results, what was required for preventative care, any open referrals, any HEDIS/PQRS open gaps for the patient, and if there were any relevant scanned documents recently added into the patient's chart. The EMR has an overview section which covered most of these items but was lacking the HEDIS and PQRS gaps. We also realized providers constantly changed filters in the overview section of the EMR, which made it tedious and inefficient. The initial goal was to save at least 30 seconds on any workflow. For every 30 seconds saved, times 30 patients a day and aiming to save on at least six to eight workflows could save us about three to four minutes per patient, which is a significant amount of additional time the physician has to spend counseling the patient. Internally the group deemed adding three to four minutes per patient in counseling would make a positive difference in the patient's health. After weighing many options to increase efficiency, it was determined a specific template needed to be built to integrate within the EMR, which we ended up calling the Huddle Report. The Huddle Report extracted daily data automatically from multiple sources, such as the EMR, outside commercial vendors, patient gap reports, billing data from our Practice Management software, and combined it into one easy to ready PDF page. Queries were written by the IT team that pushed to data daily into an in-house program developed by the IT team, which formatted the appropriate sections of the Huddle Report automatically. To make it even more convenient, it would print automatically every morning at 4am at every site and a link was added within the EMR in the patient's hub. With lots of testing and many edits, the Huddle Report went live in October of 2015. The Huddle report had a warm reception from the providers who now had a one page synopsis of patient data and all the care gaps in one location.

Design and Implementation

With the assistance of templates and order sets, HFMG created a process to help provide the physicians additional time with patients. Templates would help the provider preselect the sections of the body systems they wanted to work on during a visit. Incorporated into the template was the Dragon software, which allows providers to document using voice recognition technology. Order sets and favorites would also significantly save time during visits. Instead of the provider querying each lab test, DI, procedure, or medication each time, they would pick from a checklist of tests which have been typically ordered in past. To ensure helpful templates and order sets were created for providers, a report was run by IT for each provider on their top ten

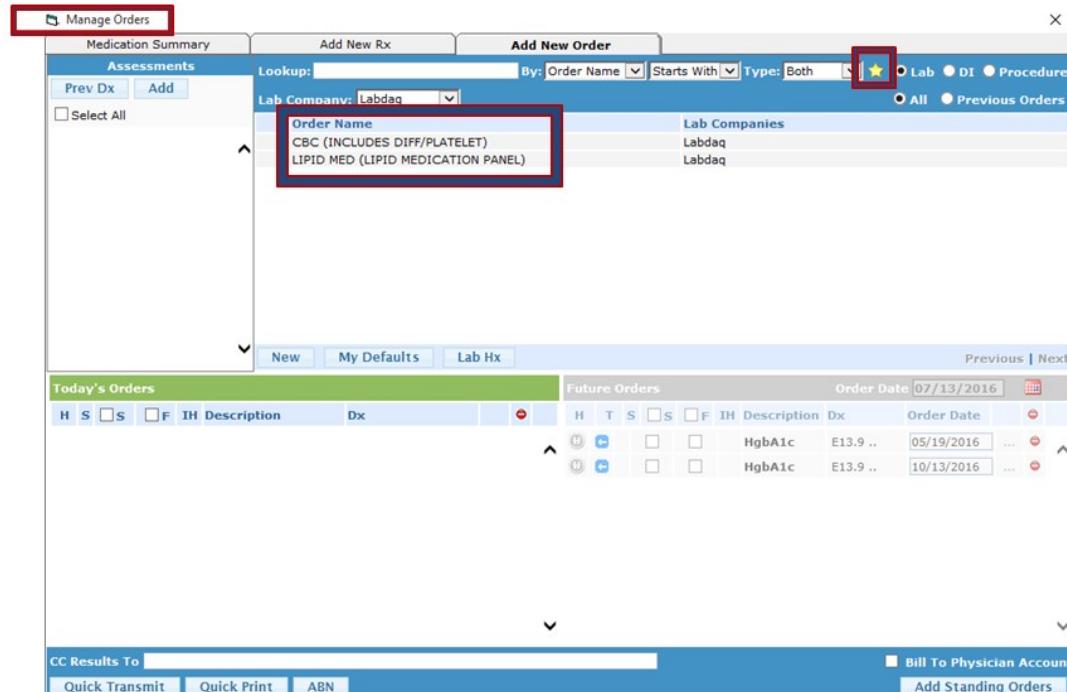
diagnoses. The average time saved within a visit using templates, favorites, and order sets was approximately two minutes per patient. The Huddle Report was a little harder to create as it was not built into the EMR. The Huddle Report would change the functionality of our group, allowing staff to review data while preparing for visits. Physicians would also use the Huddle Report to pull up certain patient information within the EMR. The Huddle Report would display outstanding tests, referrals that are outstanding, all the hospital admission dates for the patient, any new test results that came in from the last five providers they saw, the next five providers they are scheduled for, HEDIS gaps specific to that patients insurance, PQRS care gaps specific to that patient, and preventative care gaps specific to that patient. Using the Huddle Report, HFMG saved approximately two minutes per patient.

How Health IT Was Utilized

Once individual templates, order sets, and the Huddle Reports were built and saved in each provider's favorites section of the EMR, workflows were then created to ensure best overall efficiency. Once a patient arrives for a visit and they were triaged by the clinical staff, certain notes would be documented within the Progress Note notifying the providers on their findings. Staff found the Huddle Report would also help the clinical in their process of prepping the patient for the Provider. Certain sections were built for the clinical to quickly gather patient information.

The screenshot shows a software interface for managing laboratory and procedure favorites. At the top, there is a header bar with the title "My Labs, DI & Procedures Favorites". Below this is a toolbar with buttons for "MY FAVORITE" (selected), "Labs" (dropdown menu), "Add", and "Remove". The main content area is divided into two columns: "MY FAVORITES" on the left and "LAB COMPANY" on the right. The "MY FAVORITES" column contains a list of selected items with checkboxes. The "LAB COMPANY" column lists the corresponding laboratory companies for each item. A red box highlights the "MY FAVORITES" section, and another red box highlights the first two items in that list: "CBC (INCLUDES DIFF/PLATELET)" and "LIPID MED (LIPID MEDICATION PANEL)".

MY FAVORITES	LAB COMPANY
<input type="checkbox"/> CBC (INCLUDES DIFF/PLATELET)	Labdaq
<input type="checkbox"/> LIPID MED (LIPID MEDICATION PANEL)	Labdaq



- Setting favorites for labs, DI's, procedures and medications saves the provider's time from having to constantly query the same tests.

ROS:

General/Constitutional

Chills denies. Fatigue denies. Fever denies. Headache denies. Lightheadedness denies.

ENT

Ear pain denies. Swollen glands denies.

Endocrine

Excessive thirst denies. Frequent urination denies. Weakness denies.

Respiratory

Chest pain denies. Cough denies. Shortness of breath denies. Wheezing denies.

Cardiovascular

Chest pain denies. Fluid accumulation in the legs denies. Irregular heartbeat denies. Shortness of breath denies.

Gastrointestinal

Abdominal pain denies. Blood in stool denies. Change in bowel habits denies. Nausea denies. Vomiting denies.

Musculoskeletal

Muscle aches denies. Painful joints denies.

Neurologic

Headache denies. Loss of strength denies. Tingling/Numbness denies.

Psychiatric

Depressed mood denies.

ORDER SET: Test 7 **SELECT ALL** **Order** **MEASURE:** **QUICK ORDER SET: NO**

DIAGNOSES (TRIGGER): **DIAGNOSES (LINKED):**

AGE (TRIGGER): All Age **GENDER (TRIGGER):** Unknown

MESSAGE: Remember to bring you updated medication list with you at each visit. Thank you

Rx

	Name	Strength	Take	Freq	Duration	Refills	Route	Formulation	Dispense	Date	Status	Order
<input type="checkbox"/>	diovan	160MG	1 tablet	1 a day	30 Days		Oral	Tablet	30	-	Other Actions	<input type="button" value="Edit"/>

Labs

	Description	AssignedTo:	Lab Company	Frequency	Duration	Date	Status	Order
<input type="checkbox"/>	VENIPUNCTURE	Rogers, Michael IT	Labdaq	-	-	-	Other Actions	<input type="button" value="Edit"/>
<input type="checkbox"/>	CBC (INCLUDES DIFF/PLATELET)	Rogers, Michael IT	Labdaq	-	-	06/30/2016	Other Actions	<input type="button" value="Edit"/>
<input type="checkbox"/>	Venipuncture	Rogers, Michael IT	LabCorpBi	-	-	-	Other Actions	<input type="button" value="Edit"/>

Diagnostic Imaging

	Description	AssignedTo:	DI Company	Frequency	Duration	Date	Status	Order
<input type="checkbox"/>	US ABDOMINAL	Rogers, Michael IT	-	-	-	04/05/2016	Other Actions	<input type="button" value="Edit"/>

Procedures

	Description	AssignedTo:	Frequency	Duration	Date	Status	Order
<input type="checkbox"/>	CYSTOSCOPY & URETER CATHETER (Cysto w/ Retro PYE/Cath)	Rogers, Michael IT	1	2 Ds	-	Other Actions	<input type="button" value="Edit"/>
<input type="checkbox"/>	CYSTOSCOPY (CYSTOURETHROSCOPY)	Rogers, Michael IT	1	2 Ds	-	Other Actions	<input type="button" value="Edit"/>

Immunizations

	Name	Dose	Date	Status	Order	Smart Forms	Name	
<input type="checkbox"/>	B-12 INJECTION 1000MG	-	Other Actions	<input type="button" value="Edit"/>			BMI	<input type="button" value="Edit"/>
							PHQ2	<input type="button" value="Edit"/>
							PHQ9	<input type="button" value="Edit"/>

Appointments

	Order	Referrals	Order
		<input type="checkbox"/> Outgoing Referral for: Cardiology	
		<input type="checkbox"/> Outgoing Referral for: Gastroenterology	

Physician Education

PDF

ChronicCareManagement Guidelines 08202015.pdf

Patient Education

PDF

BMI Education.pdf

WEB REFERENCE

Add Save **WEB REFERENCE** Add Save **Save Message**

Message

Remember to bring you updated medication list with you at each visit.
Thank you

- Templates allow the Providers to avoid having to search for the body systems they typically use for certain diagnosis. They can further document as needed within the section through typing, macros and Dragon dictation software to efficiently document a patients visit.
- Order sets allow the Provider to quickly order tests, medications, referrals, education, specific instructions, injections and immunizations by simply checking off desired boxes and by one click order them all at once. This allows for efficiency in ordering items throughout the day for our providers.
- Favorites allow the Providers to pick from a list of labs, DI's, procedures, and medications they set as their favorites.

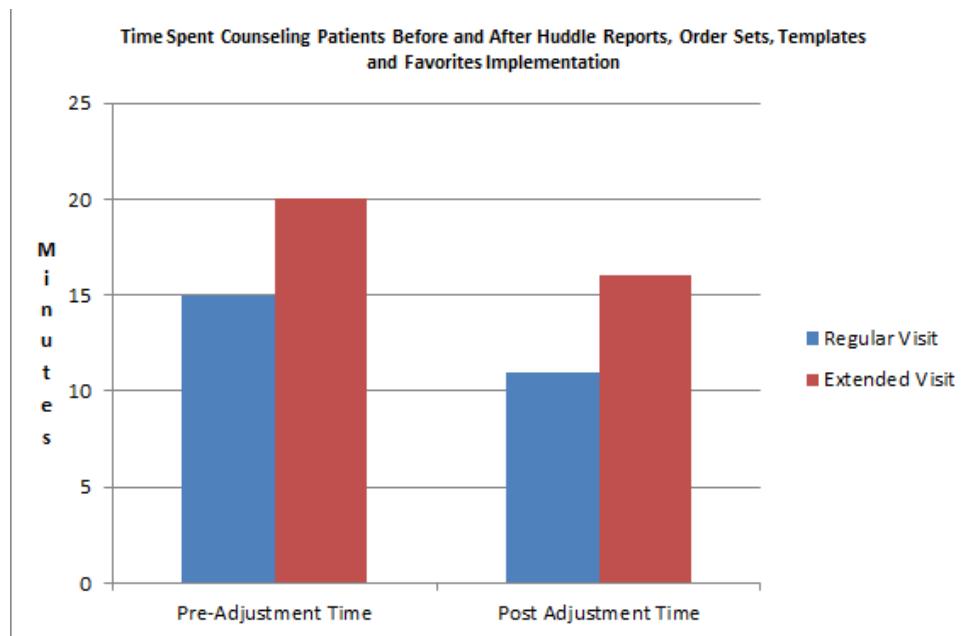
Huddle Report

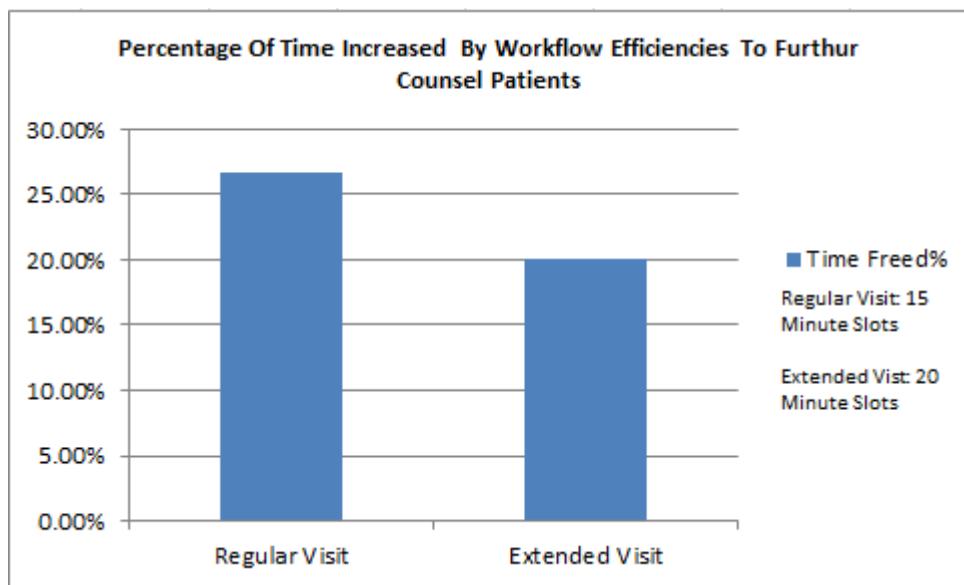
Age	Provider Name	D.O.B.	Visit	Care Team	App Time	
Appt. Notes		Balance Due		Insurance		PCP
Last 5 Visits -Provider Only		Next 5 Visits -Provider Only		Next 5 Visits Nursing/Lab Visits		
DOB	Provider Name	DOB	Provider Name	DOB	Lab Site	
n/a		n/a		n/a		
n/a		n/a		n/a		
n/a		n/a		n/a		
n/a		n/a		n/a		
n/a		n/a		n/a		
Last 5 Discharge Dates		Last 5 Scanned Documents		(Not all folders included)		
n/a		n/a		n/a		
n/a		n/a		n/a		
n/a		n/a		n/a		
n/a		n/a		n/a		
7- Outstanding Orders Continued on Open Orders Page.						
Date:	Provider Name:	Order Name:				
n/a		n/a		n/a		
n/a		n/a		n/a		
n/a		n/a		n/a		
n/a		n/a		n/a		
n/a		n/a		n/a		
8- Outstanding Referrals						
Date:	From:	To/Specialty:	Reason:	Status:	Appt Date:	
n/a	n/a	n/a	n/a	n/a	n/a	
n/a	n/a	n/a	n/a	n/a	n/a	
n/a	n/a	n/a	n/a	n/a	n/a	
n/a	n/a	n/a	n/a	n/a	n/a	
n/a	n/a	n/a	n/a	n/a	n/a	
<i>As a provider if you do not feel that a care gap below is clinically relevant or beneficial for a particular patient, please close the gap by using exclusions that are available in ECRW</i>						
9- Care Opportunities						
<i>Heds/Insurance -Please see Heds/Insurance page for detailed descriptions</i>						
n/a	n/a	n/a	n/a	n/a	n/a	
n/a	n/a	n/a	n/a	n/a	n/a	
n/a	n/a	n/a	n/a	n/a	n/a	
n/a	n/a	n/a	n/a	n/a	n/a	
n/a	n/a	n/a	n/a	n/a	n/a	
<i>PQRS Measures - Please see P.Q.R.S page for detailed descriptions</i>						
n/a	n/a	n/a	n/a	n/a	n/a	
n/a	n/a	n/a	n/a	n/a	n/a	
n/a	n/a	n/a	n/a	n/a	n/a	
<i>C.D.S.S Alerts - Please see C.D.S.S page for detailed descriptions</i>						
n/a	n/a	n/a	n/a	n/a	n/a	
n/a	n/a	n/a	n/a	n/a	n/a	
n/a	n/a	n/a	n/a	n/a	n/a	
Last Wellness Visit		Last Annual Physical				
N/A						
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						
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- The Huddle Report concept was the vision of the CEO and created internally by the IT team.
- Office staff uses the Huddle Report to prep for patient visits with efficiency and it allows the visits to be through, improving patient outcomes.
- Providers get a one page overview of the patient and all the care opportunities are in a one page summary, listed as actionable items. It saves providers time from flipping through many different screens, trying to remember all the preventative care measures for the patient.
- With the Huddle, we were able to increase overall Group efficiency in every aspect of the practice, increase patient outcomes, which led to improvement in financial returns across all incentive programs.
- It has changed the Groups culture from volume to outcomes based care.

Value Derived

Implementing the new EMR has been very beneficial to HFMG. With its many tools and enhanced capabilities, the organization was able to benefit from workflow efficiencies, as well as improving patient outcomes. Patient satisfaction plays a large role in the time spent counseling the patient face-to-face. The feedback patients commonly request is an increase in eye contact with a provider during a visit. With IT's help in building workflows using the tools built into the EMR, such as templates, favorites, order sets, and the Huddle Report, HFMG was able to increase patient engagement, face-to-face time by 27% for 15-minute appointment time slots. For a 20-minute appointment time slot, the counseling face-to-face time increased by 20%. With the implementation of the Huddle Report, compliancy for PQRS and HEDIS programs also increased, which lead to increased financial reimbursements in incentive dollars Group wide.





Lessons Learned

Converting to a new EMR has its challenges. With all the great tools, interfacing capabilities, and reporting features we realized efficiencies could be built in to increase providers' time spent counseling patients. It was realized providers were spending increased amounts of time searching for common tools and spending a lot of time querying for similar tests for every patient. These were all glaring inefficiencies that needed to be corrected. The goal of the project was to increase the face-to-face time a provider spends with a patient, which required creating shortcuts within the EMR. It also lead to the IT creating the Huddle Report which showed exactly what was done on the patient and what was pending in a one page synopsis for the patient. This report was not limited to only the data in the EMR, it also pulled data from commercial payers and hospitals as well. This took efficiency to the next level, giving providers a full scope of a patient's care, while leaving them time to take action on the care gaps. With enhancements in technology HFMG was able to take advantage of the added efficiencies in their workflows.

Financial Considerations

The initial setup cost of the EMR implementation with hardware, software, and training was in the mid six figure range. It included in-house networking equipment, servers to host the EMR, equipment for all our locations, setup fees, and implementation of EclinicalWorks. The lab and DI interfaces cost between \$5,000 to \$12,000 each. The interfaces allow staff to share data electronically, saving staff time and reducing human errors. It also enhanced the process allowing for the ability to graph test results and trend data, which eventually leads to enhanced patient care. This led to a soft ROI and would pay for itself in a few years. There was also an increase in IT staffing, QA staffing, and overall training costs for the group. Dashboard software cost to integrate with the EMR averaged around \$20,000, with ongoing support averaging \$4,000 yearly. Some ongoing costs include licensing costs per provider for the EMR, support contracts for hardware for the EMR, monthly offsite backups, security/compliance services, and yearly increase in storage devices for data storage. Most of EMR cost was offset by Meaningful Use dollars

initially. Recently, with increases in efficiencies in workflows, HFMG is able to accomplish and capture incentive dollars from programs, such as pay for performance contracting, PCMH, and Meaningful Use for certain new providers. HFMG is currently striving for one deviation above the standard for PQRS, which leads to a two to four percent increase in Medicare Reimbursements. With a talented in-house IT Team, advancements and efficiencies in technology, we are in the process of working with vendors in various pilot programs that offer other financial revenue streams.