The Post Implementation Report is used to evaluate the effectiveness of Practice Fusion EHR implementation at Waverly Family Health. Included in the first section are interview questions/short survey answered to provide context to the project's success. The next sections provide content to project's objectives and opportunities to strengthen the system. By sharing these results with the project team as well as organization staff, we hope to jointly use these findings to initiate conversations on what could be done better in the future and initiate actions for any items still needing resolution.

1   Introduction

1.1   Interview Questions

1. **Physician Question: What are your reasons for implementing an EHR?**
   a. The new Practice Fusion EHR that we have implemented comes with a financial cost, but the hope is to see a return on investment with better patient care. This is through our patient portal that patients have easier access to the tools they need to handle and organize the care we deliver to them. For instance, they can see all test results, schedule appts, email our staff with basic health questions and also look up any educational material that we give them. With this new technology we also hope to have better efficiency with billing. We can ask the patient to make payments through their portal, and we can also make sure we are using all the tools for improved billing to insurance networks. Overall, these changes should enhance our ability to perform for our customers, as well as the success of our clinic in years to come.

2. **Staff Question: What skills and resources does your organization have that make you believe the project will be successful?**
   a. We had a large amount of support with this change. The clinic had a project/Informatics manager that really helped us review, assess, plan, and act towards a goal that would otherwise be very difficult. We also had computer stations installed for any documentation that needs to be done in real time.

3. **Physician Question: Has the significance of the EHR project for your organization changed?**
   a. At first, I was hesitant to make this change. It is a cost to our clinic and wasn't too sure if there was as much significance that I do now. When you don't understand the EHR tools, it is hard to realize potentials. After, and through implementation, I was able to better understand from reviews of the EHR from the vendor. I also was able to understand how beneficial this is for our patients! I am glad we are making the first step towards a more reliable and sustainable future for our clinic.

4. **Frontline Staff Question: What have been the key challenges that you have faced so far? How have these challenges been addressed?**

a. The challenges were many. I guess all implementations have them. It was really stressful for the first month of go-live. It seemed like physicians were more stressed as they were trying to find certain orders that they were not used to writing… for instance one provider knew and always wrote a Chem-7 panel, but that wording had changed a while ago and we always entered it for him as a CMP. Know that he has to enter in his own order and be aware of the proper naming conventions. It was challenging to put in all the patient information into the system prior to our first day of going live. I think you guys call it a "cut-over". Most of the documents were uploaded as a pdf file, but the demographics, insurances, they all had to be manually entered. We had support, but overall, the first month was hard. We overcame it and now we are somewhat in a routine again.

5. **Question for all: What features or functionality do you find in the EHR that are particularly helpful for the clinic?**
   a. From Nurse: I love that I get an alert if the patient needs routine care! This helps me as a clinician to provide preventative care for patients.
   b. From front desk: I love that the EHR allows the provider to enter in his own orders! I had many times when the handwriting was difficult to read! We came very close to putting in a few incorrect orders. This will only help patient safety.
   c. From Provider: The EHR, even though was difficult at first, is helpful in having predetermined order sets that I can utilize to speed up my time for placing any orders. I like how I can customize them and save them as a favorite for future clients that need the same routine orders. An example of this would be clients that come in for annual exams and labs. The other thing that is useful is that we do not dictate to a vendor and have to pay for that anymore. I have saved templates that help me with each patient visit. Then I fill in the customized areas for that particular patient. This helps with increased time with the patient and decreases that amount of time I spend after the patient leaves dictating by phone.

1.2 Project Identification

- Developer: Practice Fusion, Inc.
- Product Name & Version: Practice Fusion EHR 3.7
- Date Certified: December 31, 2018
- CHPL Certification ID: 15.04.04.2924.Prac.37.00.0.181231
- Certification Edition: 2015 Edition
- Certification criteria: 170.315(a) (1-15); 170.315(b) (1-3, 6); 170.315(c) (1-3); 170.315(d) (1-9); 170.315(e) (1-3); 170.315(f)(1); 170.315(g) (3-9)
- Additional Required Software: Updox Direct 2016.1

2 Evaluation Summary

The purpose of this section is to provide a summary of the overall adequacy and acceptance of the system.

2.1 General Satisfaction with the System

The following comments were recorded to address general EHR satisfaction.

1. **User Satisfaction:**
Overall, users are satisfied with the new platform. Staff and providers are still learning but can see the value in the application.

2. **Strengths and Success of the System:**
Strengths of the system has allowed staff to view medical records in real-time, schedule more efficiently and standardize data entry.

3. **Problems:**
Not everyone has adopted the new system at the same level. Contracted providers or staff that don't work as often tend to forget how to use the application and require more training.

4. **Frequently Used Features:**
   - Providers and staff love the alerts feature
   - My phrases for repetitive documentation
   - e-Prescribing
   - Insurance eligibility verification
   - Lab orders through interface
   - Coding assistant based on documentation
   - Spellcheck
   - Reports
   - Patient portal

5. **Features not used at all:**
   - Speech recognition
   - Integrated Clearinghouse

6. **Suggested Improvements:**
Some of the workflows are not as intuitive as they could be. Also, it would nice to have a real-time quality metrics dashboard for each our payer HEDIS measures and other agency reporting requirements built in. It does have a financial dashboard but an EHR dashboard is equally as important.

2.2 Current Cost-Benefit Justification

The cost of the project was estimated at $20,000. The annual EHR subscription covered most of the this. More costs were attributed to internet speed to support users and system performance. While we already had basic workstations, some required updating and we also needed to prepare for new staff and outdated equipment or equipment failure. Furthermore, the budget was short when we took into consideration provider productivity. We fell short approximately 20%.

2.3 Needed Changes or Enhancements

While the system works well, the project team noted opportunities for enhancements:

- Enhanced Data Reporting
    - Grant reporting and tracking
    - Quality Metrics
    - Provider Productivity – No Show Rates
- Ability customize templates based on specialty
    - Optometry
    - Behavioral health – assessment and plans
- Ability to customize templates for specific payer programs (CPSP, CDP)
- More Telehealth flexibility and ability to customize documentation requirements
- Billing team noted system needs flexibility to meet varying payers rules when more than one payer is attached to a single encounter

3 Analysis and Implementation

The purpose of this section is to gauge the completeness of the functional requirements and implementation according to the project plan.

3.1 Purpose and Objectives

The project overall was a success but there were delays. Due to COVID-19 PHE, we experienced delays receiving equipment orders. Testing proved some EHR inefficiencies and therefore, more time was needed to address potential workarounds. While the Practice Fusion EHR did meet the basic requirements, as testing progressed there was more to be desired in terms of functionality and documentation. Our Clinical Documentation Improvement Auditors reviewed the completed chart notes and some of the templates automated clinical information, but it was unorganized and hard to tell what happened on the date of service and what was carried forward. Currently, we are working on improving clinical documentation in hopes when the information is shared in the patient portal it is clear and concise for the patient.

3.2 Scope

Waverly Family Health had a solid plan in place. Variations from the scope of project were minor but could not have been avoided. The project scope was followed but some of the project timeframes had to be extended as mentioned above. Future changes the project scope would be to allow more time for testing and time to develop training materials.

3.3 Benefits

Waverly Family Health is realizing the benefits of the electronic health record. Standardization of data is extremely helpful. Also, having the ability for the clinicians to e-prescribe, order labs, and various ancillary services has benefited the workflows,

especially for medical support staff. We hope to expand the EHR functionality as it relates to HIE (Health Information Exchange) as well as communicate more with our patients through patient portal. In addition, we are working on expanding access with Telehealth.

3.4   Training

Training was successful but the rollout could have been more streamlined. We did find there were varying stages of completion by department and assignments were not completed consistently. In addition, there were also varying degrees of work product. Below are some of the highlights.

- The timeliness of the training provided although project was delayed
- The adequacy of the training varied by project lead
- The appropriateness of the training was met overall
- Identified additional training needs by job category:
    - Billing Department and Charge Processing
    - EDI Claim Submissions
    - Nurses: Completed Orders without Charges
    - Medication Inventory Tracking

4   Outputs

In this section, Waverly Family Health reports adequacy and usefulness of the outputs from the Practice Fusion EHR system. Outputs are defined as the clinical records (data) generated by patient visits and any associate data such as billing, coding, quality reports/data.

4.1   Usefulness

We asked 10 different staff members about the usefulness of the new Practice Fusion EHR platform and the ability to meet our clinic's needs. Below is the outcome of the responses received.

- Usability: 8/10 found the system adequate
- E-prescribing: 10/10 found this essential
- Reporting & Dashboard: 8/10 found this highly desirable. (While the system out of the box comes with some reports, more is desired.)
- Preferred EHR vs Paper: 7/10 prefer the EHR while some still prefer paper systems.

4.2   Timeliness

The system performance is adequate, but timeliness of certain workflows is only as timely as the user completes the task. We noticed that not all records are completed in a timely fashion. Delays in chart completion and charge submission also causes billing delays. A study conducted revealed that on average Waverly Family Health's clinicians take approximately 3-5 business days to complete records, therefore first claim

submissions are averaging 7-10 business days from date of service. Centers for Medicare and Medicaid Services (CMS) states all documentation should be completed within a reasonable timeframe which is defined as 48 hours from date of service.

4.3   Data Quality

Data quality is essential to billing, reporting, quality measures, coordination of care, and patient safety. As we continue to audit our records, we will work with our clinicians on documentation improvement. This includes all specialties such as dental, behavioural health, optometry, and nurse only visits. We will also coordinate these efforts with our training department to standardize workflows that enhance the clinic's data integrity at all levels from front office to billing.

5   Security

The purpose of this section is to determine if the system provides adequate security of data and programs. A reassessment of HIPAA compliance is part Waverly Family Health's review process. In addition to access security, procedures for backup, recovery, and restart were reviewed during post implementation evaluation.

5.1   Data Protection

Waverly Family Health is finalizing policies and procedures that protect the organization and will implement a Disaster Recovery Plan. The Disaster Recovery Plan will include security, backup, recovery, and restart capabilities adequately safeguard data. The following will be evaluated:

- The adequacy of the security, backup, recovery, and restart procedures
- Data and activity meet HIPAA compliance
- If data and clinical activity with the EHR does not meet HIPAA/security compliance indicate what additional steps will be necessary to ensure compliance

5.2   Disaster Recovery

A network Disaster Recovery Plan includes backup of clinical files, programs, and procedures are established to enable recovery from a disaster (unintended down time of EHR) resulting in the potential loss of data or lack of access to stored data. Waverly Family Health will establish the following:

- Establish Backup Policies and Procedures
- Staff training to demonstrate ability to perform down time procedures for all clinical activities
- Ability to access backup data for downtime procedures

5.3   Audit Trails

Waverly Family Health will establish audit processes and reports to ensure clinical data integrity. Ongoing monitoring and trends will be presented monthly to senior management to discuss findings and next steps to mitigate errors found.

- IT and Compliance Teams will report:
    - Snooping in charts
    - Timely referrals
    - Inaccurate template usage
    - Incomplete records
    - Patient and staff grievances
    - Privacy breaches
    - Patient safety

5.4 System Access

Security is of the utmost importance to Waverly Family Health Center. Proper rights and protocols are put in place to ensure privacy and HIPAA compliance. Waverly Family Health has identified the following to assure system access needs are met and compliant.

- Policies and Procedures governing access for the EHR systems
- Current BAA (Business Associate Agreement) in place for all vendors and contracted parties who access the system
- Assignment of Security Officer
- Criteria for level of access to EHR systems and system rights
- Documenting any access breaches, including faxes, and mishandling of records
- Frequency of access review for new, established and terminated employees
- Breech notification plan is created to Compliance Team

6 Computer Operations & Workflows

Waverly Family Health's goal is to at minimum maintain the current level of operational activities. The operational activities include a deep dive into workflows and the technical components needed to perform all necessary activities in the health center.

6.1 Control of the Workflow

Waverly Family Health will evaluate the EHR user interface for collecting clinical data for given workflows. In addition, investigate issues related to data gathering at given points in workflow. Waverly Family Health will address:

- Any problems in accomplishing clinical workflow processes
- The frequency and extent of problems related to clinical data gathering within a workflow
- Suggested changes from end users
- The effort or barriers required to make changes to the EHR to remediate issues

6.2   Scheduling

Waverly Health Center will implement a standard scheduling template. The organization will control the schedule based on patient needs and there will be NO CUSTOMIZATIONS allowed to scheduling templates. All slots are 20 minutes with 2 Majors for each 4 hours session. MAJORs include new patients, preventive visits, pap smears, and minor procedures. MAJORs will not be first on the morning schedule or the last appointment of the day. 12 patients should be scheduled for all sessions. Providers will work four 10 hours shifts and the additional 2 hours each day will be considered administration time.

6.3   EHR User Interface

Waverly Family Health analyzed the usability of the system for one month post implementation. Below are the results reported:
* 1175 visits pre-EHR, 924 Post EHR
* 60% of visits had documentation errors
* Interfaced timed out 16 times
* 9% claim denial rate
* 25 Password resets

Conclusion: Waverly Health Center is considering 2 new positions. IT Support and Systems Engineer.

6.4   Computer Systems

The two new positions created will analyze computer issues and software problems. Their roles will address the following areas:

* Answer questions and create IT ticketing system
* Address the correct or incorrect use of forms and offline files
* The adequacy of training instructions for end-users on use of EHR
* Downtimes via web access through practice
* Software bugs or glitches as described by end users
* Hardware issues
* The level of user satisfaction
* The adequacy of the response time (for online systems)
* The effect of delays on online and/or batch systems
* Suggested changes
* The effort required to make the changes

7   Maintenance

Waverly Family Health will evaluate maintenance activity involving the EHR system software and all hardware components.

7.1 Activity Summary

Maintenance Activities to Date	
Maintenance Task	**Frequency**
Defragment Hard drives	Weekly
Backup Data	Daily
Install Updates	As Needed
Update antivirus	As Needed
Change Passwords	Monthly
Reboot Devices	Daily
Organize Cords	Monthly
Keep Food and Drink Away	Daily

8 Conclusion

Waverly Family Health is happy to announce a successful transition to an electronic health record from paper charts. Ongoing evaluation and process improvements will continue. All applications will be monitored and updates to existing policies and procedures will continue as we move into the future. Special thanks to all project team members and their contributions to this project. Thank you to all staff for making this possible for our organization.