Final Report

Medical Practice Software Solution

Prepared for Dr. Patrick Ellis Psychiatry and Nutritional Medicine



Prepared by MIS Field Project Team 3, University of Oklahoma

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Table of Contents

Add Headings (Format > Paragraph styles) and they will appear in your table of contents.

Medical Practice Software Solution Executive Summary

Prepared by the University of Oklahoma Field Project Team 3 April 17, 2019

Dr. Ellis has asked the Price College of Business Field Project Team 3 to determine the most advantageous medical practice office management software to help ease his business in the field of scheduling, billing, and sales. Currently, Dr. Ellis' office operates using two outdated softwares called POS Maid and Quick Practice, where they have to contact the clients directly in order to confirm and manually record appointments. The current software being used is outdated and unaligned with the goals of the organization. The goal of the new practice management system is for it to feature automated scheduling, biling, and reporting functions that will divert front office time from the secretary to the patient so that the business can focus on in-office customer satisfaction. The new system will allow the business end of the company to be more organized and allow the staff to perform secretarial objectives in a more timely fashion. There are several alternatives that Dr. Ellis faces with the decision as to what software to implement.

Employees will work hand-in-hand with the software however will be allowed more time to do analysis or implement marketing techniques in order to increase clientele. The most significant change for the front office employees will include the reduction of first hand scheduling confirmations, hand-written superbills, and payment processing. With the new software these tasks will be simultaneously performed allowing Dr. Ellis' practice to become more organized and more efficient.

The agreed-upon software solution will incorporate appointment scheduling, claims, statements, reports, as well as being incorporated neatly within a patient portal. The appointment scheduling will allow for the user to schedule and confirm their own appointments while preventing double-booking. The solution will be capable of sending insurance claims to the patient's' insurance as well as sending bills regarding to the patients appointments at the firm. The dashboard of the software will allow the employees to run reports on the demographic of their clients as well as the amount each patient owes to the firm. The recommended approach includes:

- Pinpoint the exact software specifications Dr. Ellis desires
- Research the possible software solutions that possess specifications
- Analyze a set of practice management software
- Provide recommendation of software to Dr. Ellis that fits project specifications and pricing

Introduction

This report gives an overview of both the current state of Dr. Ellis's practice management system as well as the expectations for the new solution. First, this report shows the functionality of the current system and how it has allowed the office to conduct business. Next, this report addresses

the business requirements that are no longer being met by the current system. Using the information given to us by Dr. Ellis and his staff, the information in this report covers the features needed to be included in the new system. This report briefly focuses on the alternatives considered and the criteria used to make a final recommendation and decision. Finally, this report illustrates the implementation plan suggested by the team.

Current Situation Analysis

Project Statement

Currently, the scheduling process goes as follows: Patients call the front office to schedule their appointment which the practitioner who then enters the appointment into their calendar. The practitioner will then call or text the patient to remind them of their upcoming appointment. The patient then confirms or denies the appointment. If the appointment is confirmed, the practitioner then lists this patient on their printed schedule along with other patients. Finally, the patient will show up for their appointment and the doctor will see the patient. The new system will need to allow the customer to schedule their appointments online, then automatically send text reminders to the patient when their appointment date is near. The appointment will also be updated to the practitioners schedule automatically, and if the patient decides to cancel the appointment, it will be cleared from the schedule.

Strategic Alignment Analysis

In 1995, Dr. Patrick ellis earned his medical degree from Oklahoma State University College of Osteopathic Medicine. Since then, Dr. Ellis has established D.O. Psychiatry and Nutritional Medicine where he provides a service in which patients can better themselves through the proper guidance and treatment. Dr. Ellis uses a personalized treatment approach to help better patients lives by looking into their particular situations and prescribing the proper medication and/or treatment. A vital source in helping this business run efficiently is the practitioners who run the front office and handle various scheduling and billing tasks, working with two software systems called Quick Practice and POS Maid. Scheduling and billing tasks need to be as efficient as possible in order to keep up with business demands. However, the current system does not provide the tools to properly meet these demands. In order to drastically improve scheduling and billing tasks, the business needs to search for an alternative solution that handles these requirements.

Mission and Goals

Dr. Ellis's mission is to look into each patient's particular situation and provide them with whatever they need in order to improve their quality of life in a safe and professional manner. This includes prescribing medication, counseling, supplements, or whatever they need to achieve this goal. By gathering information about people's lifestyles, personalities, and history, Dr. Ellis seeks to create a unique and efficient solution to each of his patients situations.

Evaluation Measures

Our team used the following evaluation methods in searching for the appropriate software solution for Dr. Ellis's business:

- Ease of use: Both Dr. Ellis and the practitioners need to be able to learn and use the system to their full potential with the least amount of complications.
- Functionality: The system should be able to provide many of the features and functionality that has been discussed in our meetings.
- Cost effectiveness: The cost of using different software is compared to the value it will add to the business.

Goals and Features for the Proposed System

The overall goal for our proposed system is to improve the efficiency of the business processes at Dr. Ellis D.O. by allowing users to do the following:

- Make secure online payments
- Print superbills and access Elabs
- Upload documents to the system
- Have access to a patient portal for scheduling purposes
- Keep track of payment information in real time
- Automate appointment reminders

Incorporating a system that can deliver upon these requirements will save the business valuable time and ensure that data is accurate, easily obtainable, up to date, and easily accessible.

Current Operations

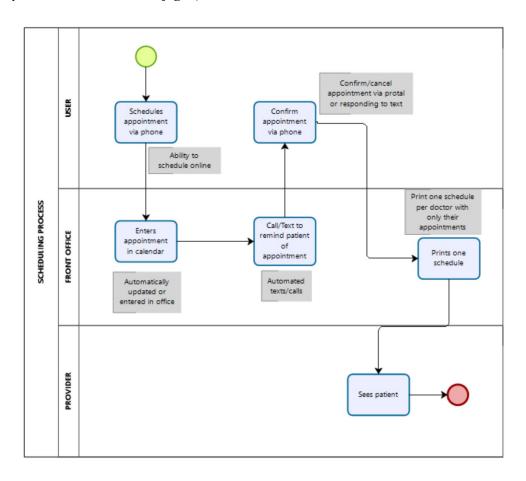
Current Systems Analysis

Dr. Patrick Ellis, D.O Psychiatry & Nutritional Medicine has provided a walkthrough of how their current operations work. Current Operations consists of: managing patient scheduling, billing, preparation of paperwork for appointments. Our team members were able to comprehend and understand the current system as well as how the current system can affect the efficiency of the workplace. The current system goes as follows:

Current Systems Narrative

User calls Dr. Patrick Ellis, D.O. Psychiatry & Nutritional Medicine. Front office finds their name in system and Schedules appointment via phone. Front Office then enters appointment in calendar. Front Office calls/texts user to remind patient of appointment. User confirms appointment with Front Office. A schedule is printed from the Front Office. After set and done, Provider sees Patient.

Current Systems Process Model (fig. 1)



Retention and Change analysis

After evaluating the current system, the proposed system will keep certain functions, such as, the user ability to schedule appointment via phone, the Front Office ability to enter appointments in calendar and printing of a schedule, and the process in which the Front Office sees patient. The new system will bring changes and provide efficiency within the Scheduling system, such as, the ability for User to schedule online and confirm/cancel appointment via portal or text, ability of schedule to be automatically updated or entered in Front Office, automated texts/calls, and for Front Office to print one schedule per doctor with only their appointments. Whether through Service (SaaS) or purchased, the proposed system will also have the ability to integrate with POS systems, as well as, provide technical support, locally or Out of State, to ensure user friendliness.

Retention	Change
User can create/confirm appointments via phone	User can schedule online
Front office ability to enter appointments in calendar	User can Confirm/Cancel appointment via phone or text
Front office printing of a schedule	Schedule to be automatically updated or entered in Front Office
Process in which the front office sees patient	Automated texts/Calls
	Office ability to print one schedule per practitioner with only their appointments

New System Specifications

New System Analysis

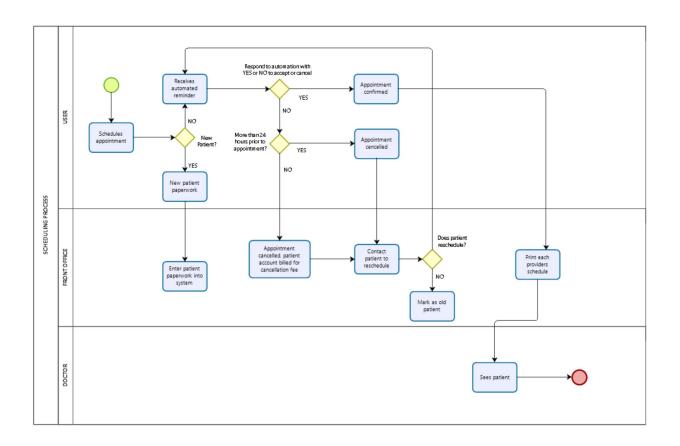
A patient will create an account through a patient portal. After creating this account, the user will fill out any necessary onboarding forms before the first appointment. The user will then schedule an appointment with either of the providers. Within a specified period the system will automate an email and/or text message that will remind the user of the appointment and prompt this user to confirm that the user will be able to attend this appointment. If the user can not make the appointment, they will click the link and press the button which marks that this user will need to cancel this appointment.

On the day of the appointment, the staff will be able to print out separated schedules for each provider and specify the time, patient, and any other important details you would wish to include. Once the patient arrives to the office, the staff can confirm the patients bills have been paid or their insurance information is up-to-date. If any information needs to be changed the staff can update the patient's profile. If a copy of the insurance or any patient documentation is required, the staff may use a scanner in order to upload this documentation into the patient's profile.

After the patient has seen one of the providers, the patient will then stop by the counter to discuss the next appointment time. The staff will then fill out the superbill through the system and give it to the patient.

If the staff wishes to run a report regarding appointments, sales, or demographics the system can do so with ease, just clicking the boxes of the report with the values you wish to see in the report.

New system process model (fig. 2)



Alternative Evaluation and Recommendation

"In Price Range" key			
=	in price range		
+	over budget		
-	under budget		

very important (5)
important (4)
somewhat important (3)
not very important (2)
not important (1)

NextGen Office offers the most thorough solution that meets the needs and wants of the business. NextGen Office allows Dr. Ellis Psychiatry and Nutritional Medicine to streamline their business practices. The functionality of NextGen allows staff members to automate patient reminders, print superbills, upload documents to the system and more. Overall switching to NextGen Office will give the front office staff time back that would otherwise be spent doing manual tasks.

Implementation and Support

Implementation schedule

In order to get the new software implemented the office will need to purchase their patient information from QuickPractice for a one time fee of \$250. QuickPractice will then export the patient information to a CSV file that NextGen will use to import existing patient information into the new software. Once the patient information is uploaded the office staff will begin training.

Testing plan

Implementation strategy

To implement the new software: we will give our recommendation to the practice, they will most likely purchase the software, we will then assure that the staff is trained in the staff is trained on how to do it, and then assure that one staff member is the "expert" on the new software.

Hardware and data conversion

The new software will require a new TPS for the office to scan cards and items. We will also recommend a new faxing machine for the office.

To complete the data conversions, the personnel must come into contact with QuickPractice, follow the necessary steps asked, and pay the price of \$250 to transfer data to a CSV file. From there the file can be opened through a spreadsheet program such as Microsoft Excel or Google Docs. Then , the data should be imported into new software.

Training

Nextgen will provide training videos and walkthroughs of the new software. The company will guide the staff through the software until they are sufficiently able to use it. We will then see that a member of the staff is trained further so that they can be the "expert" for the office.

Maintenance

Nextgen will be taking care of all of the future maintenance for the software and will help customise the dashboards and layout for the office.

Emergency Plan

If there is any sort of emergency with the software implementation Nextgen will be more than willing to help mitigate or eliminate the problem.

Appendix A: Statement of Work



Statement of Work Prepared for Dr. Ellis Psychiatry & Nutritional Medicine Prepared by Team 3 February 8th, 2019

Organization Description

Dr. Ellis Psychiatry and Nutritional Medicine is a growing private psychiatry clinic in Norman Oklahoma. Their mission is to promote mental health and wellness through the use of medication, medical supplements, nutrition and mind-body approaches. The office of Dr. Ellis uses integrative techniques in order to find personalized approaches based on the patient and their needs. With the increasing growth of the office they are needing to provide fast access to their services in order to streamline work processes and patient ease of access.

Problem Statement

Dr. Ellis Psychiatry and Nutritional Medicine is in need of a new software system. They are searching for a software that is able to manage patient scheduling and billing and automated reminders for patients. Dr. Ellis would like a patient portal so existing patients can schedule or reschedule appointments.

Work Product

- Understand the business problem Dr. Ellis is currently having
- Research products that will fit the needs of the office
- Review features of the products and compare based off preferred features
- Make a recommendation
- Proof of Concept

Deliverables

Constraints

- Finding one software solution for all the wishes
- Backing up and focusing on the main business problem
- Must be HIPPA compliant

Resources Required

- Permission to use office's name while looking for software to purchase
- Permission to request input from office staff

Backup Final Presentation.......04/26/19

A. B. Schwarzkopf, Team 3 Manager	Patrick Ellis, D.O.	
Date	Date	

Appendix B: Requirements Document

Business Goals

- Ability to send automated reminders
- Print separate schedules
- Print superbills
- Upload documents to the system

IT Requirements

- ????

Appendix C: Meeting Notes and Correspondence

Initial Meeting Notes

- What Do You want to do that you are currently unable to do?
 - a. *Highest to lowest priority*
 - 1. To print two separate schedules
 - 2. Needs patient reminder (Calls or Texts)
 - 3. Needs to print SUPERBILLS
 - 4. Move printed copy to software or software needs to be able to do what the printed copy does
 - 5. Prefer a local service to help with technology support but is open to other options. Just wants a working software
 - 6. Software that interfaces with lab paperwork
 - 7. Interfaces with the point of sale
 - 8. Maintain a cancellation list/waiting list for patients (if one cancels, open to others)
 - 9. HIPPA information is currently entered on paper and it could be online (they have to be a patient in order to fill this out)
 - 10. List of recommended therapy offices nearby need to be moved to online instead of paper (be able to select certain offices out of the entire list and print)
 - 11. Secure payment information into profile
 - 12. Scanner that can read ID and upload into computer
 - 13. Payment information that avoids (EHR, EMR), but can be added later
 - 14. Escribing (able to send prescriptions to other pharmacies electronically)
 - 2. What are you looking for in a new scheduling/billing software?
 - a. Make an online calendar available for patients to make scheduling and cancellation easier (cannot cancel within 24 hours of appointment)
 - 3. What software are you using currently?
 - a. Ouick Practice
 - 4. Is there anything you like about the software you are currently using that you would not like to change?
 - a. No
 - 5. If there is any additional information that would be important for us to know about?

- a. Look at the Inventory, maintaining customer information (they buy and store). POS maid is the currents product name
- 6. What hardware are you currently using?
 - a. Printer/Scanner would be the only hardware to update.
- 7. Is it necessary that the Software company is based in Oklahoma? Is it fine if the call center is 24 hours and highly rated?
 - a. Prefer local, but open to everything/anything. Just wants it to work
- 8. EXTRA NOTES
 - a. Schedular needs to have a lot of flexibility
 - b. Plan to add more providers in the future, so upgradable and flexible

Team Meeting Notes

- 1. Look at scheduling and contact
 - a. Not HIPAA
- 2. POS to do retail tracking
- 3. Look into Quickbooks
- 4. Get familiar with range of products
- 5. Expand our matrix, expand our search
- 6. Look at psychiatric association
- 7. Start
 - a. With Psychiatric Association
 - b. Look at Gartner as well
 - c. Look at it and compare with the Psychiatric Association
 - d. Evaluate and compare it to each other
 - e. One externally reviewed list of candidates
 - f. Look at Quickbooks
- 8. Banks probably provide Chip Card Reader usually
- 9. Do research on POSMADE
- 10. Try to look ay local first
- 11. See if it's popular in a local area

NextGen notes

- 1. EHR
 - a. Needs this to run escribing, elabs, etc.
- 2. Fully cloud based
- 3. Patient Registration

- a. Takes out the human error by taking insurance information
- b. Email and text notification

4. Scheduling

- a. Can separate the two providers
- b. Can drag and drop appointment schedules
- c. Can do eligibility checks
- d. Able to filter by provider and print out

5. Patient Portal

- a. Can change logo to yours
- b. Can upload forms
- c. Tiles are customizable
- d. Proxy access to mom or guardian
- e. Check-in list

6. EHR

- a. Single file upload
- b. Scan a document
- c. Bulk Upload
- d. Able to upload license and insurance card scanned

7. Work on claims through batches

Dr. Chrono notes

- 1. Cloud based
- 2. Color code schedule
- 3. Like Google Doc
- 4. Key information is mentioned in the scheduling process
 - a. Balances

- 5. Reminders can be set a certain amount of days
- 6. Doctor view to choose Doctor
- 7. Patient Portal works with Onpatient
 - a. Can change LOGO
 - b. Has On board forms that can filled out and easily transferred to Dr.Chrono
 - i. Customizable
 - ii. Can be pulled to Dr. notes
 - c. Consent Forms on bottom
 - i. E-signature
 - d. Has Time Slots available
 - e. Can send pamphlets

8. IPAD View

- a. Can fill out Requested Information through IPAD when checked in
- b. Kiosk Mode
- c. Changes over Time
- 9. Can run report on what's been cancelled
- 10. Partner with SQUARE Integration for POS System
- 11. Productivity Report