TITLE:	Implementation of Automatic Adherence Calls to Improve Staff Satisfaction
PROJECT TYPE:	Quality Improvement Project
INSTITUTION:	Mississippi State Department of Health Pharmacy
Initiation Date:	March 2023
Executive Sponsor:	Meg Pearson
Facilitator:	Antoniya Holloway
Team Members:	Julia Woods, Billy Clanton, Mallory Harris, Lorean Emory, Danielle Fielder, and Anna K. Lambert

BACKGROUND:

The Mississippi State Department of Health (MSDH) Pharmacy is a URAC-accredited specialty pharmacy that provides care to indigent and underserved populations in rural and suburban areas of Mississippi. One main role of pharmacists at MSDH Pharmacy is to ensure the timely dispensing and delivery of anti-retroviral therapy to qualifying patients enrolled in the AIDS Drug Assistance Program (ADAP) with funding from the Federal Ryan White Grant Program. Most patients are required to call the pharmacy for refills every 30 days in order to stay compliant with ADAP. When a patient fails to call the pharmacy for refills after 45 days from their last refill, they face "restriction" status. Restriction status prevents them from filling any prescription at MSDH Pharmacy until they have spoken to their doctor.

Typically, MSDH Pharmacy staff will print a *HealthMinder* report of all patients who are nearing restriction status every Monday and Thursday. Shortly after, staff and pharmacy students will make a phone call to the patients who are on the list to encourage compliance and refill the patients' prescriptions. Although imperative, this process is monotonous and takes away valuable time from other important staff roles. The implementation of Red Sail Technologies' *Call-Out Queue* feature will allow automatic compliance calls or texts to patients who are past due to refilling their medication(s) and close to being restricted. The implementation of this feature will free up valuable staff time, as well as ensure that more patients are compliant with prescription refills.

AIM STATEMENT:

An opportunity exists to improve the process in which staff and pharmacy students at MSDH Pharmacy complete adherence calls. With the implementation of Red Sail Technologies QS/1 Call Out Queue, adherence calls and texts will generate automatically, allowing MSDH Pharmacy staff and students more time for dispensing, patient care, and other important responsibilities.

BENEFITS OF SUCCESSFUL COMPLETION:

Implementation of the call-out queue will provide a simplified process for MSDH Pharmacy staff and students to complete adherence calls and could prevent the rate of misdials that result in more time spent and HIPAA breaches. Reducing the number of manual phone calls made to patients who are nearing the point of restriction will allow more time and focus for other important duties like providing quality assurance checks to prescriptions before delivery.

METHODS:

Data regarding number of patients successfully contacted and the amount of time spent on the adherence call process will be collected pre- and post-implementation of the Call Out Queue. Satisfaction surveys will be completed for all eligible pharmacy staff and students to collect baseline data and establish project goals prior to implementation of the Call Out Queue. After the implementation of the Call Out Queue, an identical satisfaction survey will be completed. Data will be analyzed to determine if there was any difference in time spent on making adherence calls, number of calls, and staff/student satisfaction.

Survey Questions:

- 1. How often do you make adherence calls using the adherence report?
- 2. On the days that you participate in adherence calls, approximately how long does it take you to complete all of the calls from the report?
- 3. On the days that you participate in adherence calls, approximately how many patients do you call?
- 4. On the days that you participate in adherence calls, approximately how many patients from the report answer the phone?
- 5. On a scale of 1 to 10, how much do you like the current process for completing adherence calls?
- 6. List any suggestions or concerns you have about the current process for completing adherence calls.

PROGRAM GOALS:

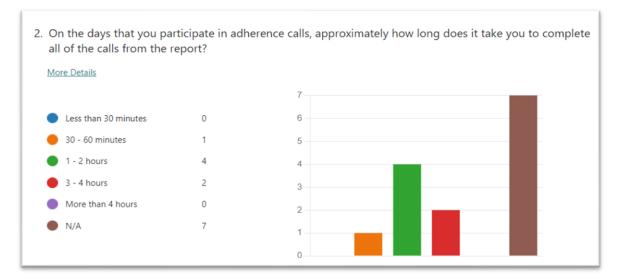
Based on the results of the initial survey data, 50% of participating MSDH Pharmacy staff do not complete adherence calls using the bi-weekly adherence report, while the other half do. Approximately 86% of MSDH Pharmacy staff who complete adherence calls report spending 1 to 4 hours completing these calls. Approximately 86% of MSDH Pharmacy staff who complete adherence calls usually call 10 to 49 patients per report day. Although the results are scattered,

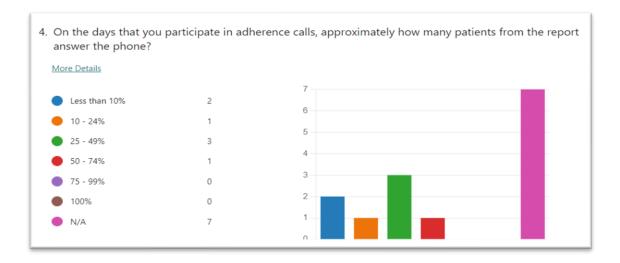
no MSDH staff person reported patient call response over 75%. The average rating for staff satisfaction with the current adherence call process was 4.60 points on a scale of 1 to 10 points. During the month of October 2022, staff members spent an average of 192 minutes (3.2 hours) per day completing the adherence call process. During the month of October 2022, staff members made successful contact with only 36% of patients from the adherence call list.

Baseline Data:

Adherence Call Data (October 2022) [collected from MSDH Pharmacy Internal Data Audit]			
Total Patients	Total Patients Who Were	Average Minutes Spent	
	Successfully Contacted	per Day	
341	124	192	

Pre-Implementation Survey Results:





5. On a scale of 1 to 10, how much do you like the current process for completing adherence calls? More Details
10

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Responses
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1 Responses			
ID \uparrow	Name	Responses	
1	anonymous	I have helped do them in the pass but it's very time consuming. Need an automatic system to do refill remainder. That would be nice.	
2	anonymous	I don't like the question on the adherence tracking form: "Do you feel that your participation in refill reminder calls has improved your quality of life?" If we were calling patients prior to or closer to 30 days, this might be applicable, but it seems like several patients are relying on our call ~45 days to remind them to fill. Perhaps we could include a statement about needing to fill every 45 days on the blue slip we attach to the bags with our phone number.	
3	anonymous	The list has a lot of patients on there that have Cabenuva and should not be called to begin with. It usually is full of numbers that no longer work for the patient.	
4	anonymous	no working numbers for patients	

Considering the results of the pre-implementation survey and baseline data, the goals of this program are to:

- Establish an automated system for the completion of adherence calls
- Reduce the average amount of time spent on adherence calls by 50%
- Reduce the number of manual calls made to patients by 50%
- Increase the average rating of staff satisfaction to 8.00 points

SWOT ANALYSIS:

Strengths	Weaknesses	
 Designated point-person to print Healthminder report Team effort in completing calls when students are not available Documentation via Microsoft forms for all calls 	 Process is time-consuming Not all patient contact numbers are correct Documentation of calls via Microsoft forms lengthens the process Healthminder report font is small and hard to read 	
Opportunities	Threats	
 Red Sail Call Out Queue on QS/1 Automatic export of Healthminder report and automatic calls, thereafter Texting and email capabilities also available through Red Sail Patients prefer texts over calls 	 Some staff may feel that IVR calls are not personal enough Potential to have to call some patients who were not successfully contacted via IVR Call Out Queue No sure confirmation that patients are reached 	

TIMEFRAME TO ACHIEVE GOALS:

The timeframe to achieve goals is 4 months (March 2023 to June 2023).

ISSUES ENCOUNTERED:

- Pharmacy students usually complete adherence calls, so there is difficulty in obtaining follow-up surveys because students are only rotating at the pharmacy for one month.
- There is limited staff member(s) who help complete adherence calls, so there is difficulty in collecting follow-up surveys

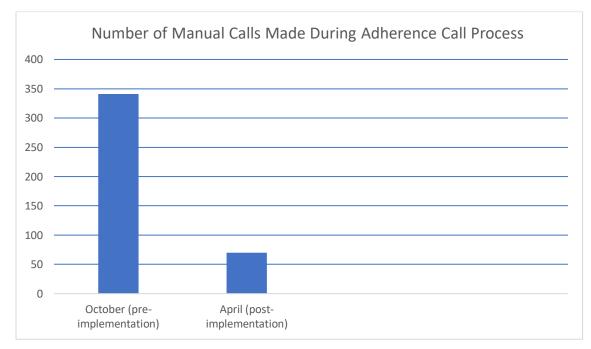
- "Failed" contact status could be a result of line conflict between outbound and inbound calls.
- Each patient profile would have to manually be set up to receive IVR calls (approximately 15 seconds per patient).

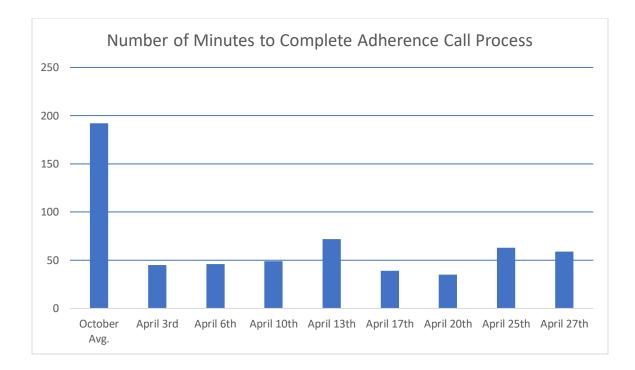
INTERVENTIONS:

- 1. Contacted QS/1 Support to set up Call Out Queue and test an automatic IVR "compliance" phone call.
- 2. Emailed network specialist to determine if ITS oversees the pharmacy's IVR phone number.
- 3. Completed a QS/1 workgroup meeting and software tutorial with Holly Krahenbuhl (QS/1 representative).
- 4. Carried out an IVR Call Out Queue test run of 26 patients.
- 5. Carried out an IVR Call Out Queue soft launch for 4 weeks.
- 6. Automated calls to repeat three times for a greater possibility of reaching more patients.
- 7. Updated pharmacy staff on the new Adherence Call Standard Operating Procedures utilizing the Call Out Queue at the Wednesday Morning Training.
- 8. Launched the Adherence Call Process as a duty of the Verification module.
- 9. Updated all pharmacy patient profiles (approximately 1,600) to receive notifications from the Call Out Queue.

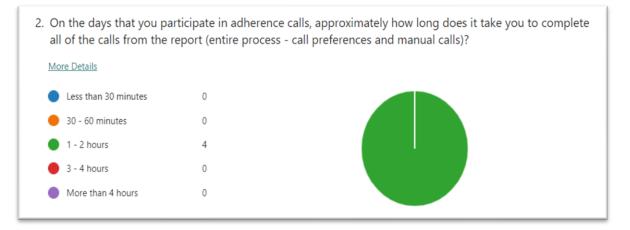
RESULTS:

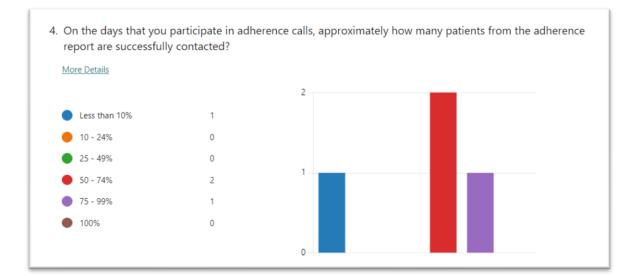
Quantitative Results:

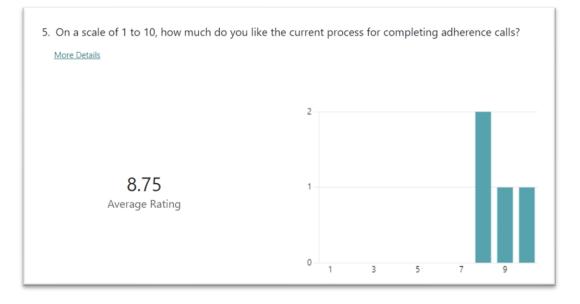




Post-Implementation Survey Results:







6.	List any suggestions or concerns you have about the current process for completing
	adherence calls.

3 Responses

ID ↑	Name	Responses
1	anonymous	No suggestions at this time.
2	anonymous	making sure that patients have refills for the medications they are being contacted about before actually contacting them
3	anonymous	I love the new process. My only "concern" but not really a concern is the people we may accidently call. If someone is restricted, we will not know that until after they call, but I do feel like the techs can just state that we accidently called you.

DISCUSSION:

We predicted that staff and students will need to make fewer manual adherence calls and will spend less time completing calls than prior to the implementation of the Call Out Queue. We also predicted that staff and students will be more satisfied with the process of completing adherence calls than prior to the implementation of the queue. Based on the results provided, all program goals have been met.

In October 2022, MSDH Pharmacy made 341 manual adherence calls utilizing the previous adherence call process. In April 2023, staff made 70 manual calls utilizing the Call Out Queue. This metric was drastically reduced by 79.47% from pre-implementation to post-implementation. The average amount of minutes taken to complete the entire adherence call process prior to the Call Out Queue was averaged to approximately 192 minutes (3.2 hours). Post-implementation, the average amount of minutes taken to complete the adherence call process was 51 minutes (0.85 hours). This metric was drastically reduced by 72.91% from pre-implementation to post-implementation.

Based on post-implementation survey results, 100% of participating staff estimated that they never spent any more than 2 hours completing the adherence call process utilizing the Call Out Queue. This number is decreased significantly from the highest estimated time spent on adherence calls reported from the pre-implementation survey, which was 4 hours. In pre-implementation survey data, staff report making successful contact with no more than 74% patients from the adherence report per day, while the staff report making successful contact with 99% of patients at the highest based on in post-implementation survey data. Post-implementation survey data revealed that the average satisfaction rating was 8.75 out of 10 points among staff compared to 4.60 points based on pre-implementation survey data. One staff member mentioned in post-implementation data that patients who are restricted from filling prescriptions may receive unnecessary calls because of the Call Out Queue. This comment goes to show that, although the addition of the automated Call Out Queue provided favorable results, continuous quality improvement should occur to further develop the adherence call process.