

**Outpatient Clinic Standardization:
Ensuring Best Practices During Clinic Flow**

by

Breanna Bruno

BS, West Virginia University, 2021

Submitted to the Graduate Faculty of the
School of Public Health in partial fulfillment
of the requirements for the degree of
Master of Health Administration

University of Pittsburgh

2023

UNIVERSITY OF PITTSBURGH

SCHOOL OF PUBLIC HEALTH

This essay is submitted

by

Breanna Bruno

on

April 20, 2023

and approved by

Essay Advisor: Kevin Broom, PhD, MBA Associate Professor, Vice Chair for Education,
Director of MHA and MHA/MBA Programs, Health Policy and Management, School of Public
Health, University of Pittsburgh

Essay Reader: Daniel J. Fisher, MHA, Assistant Chair for Administration and Operations School
of Health and Rehabilitation Sciences, University of Pittsburgh

Essay Reader: Juliya Bykova, MHA, Division Administrator, UPMC Department of
Otolaryngology

Copyright © by Breanna Bruno

2023

Outpatient Clinic Standardization: Ensuring Best Practices During Clinic Flow

Breanna Bruno, MHA

University of Pittsburgh, 2023

Abstract

Patient safety, satisfaction, financial stability, and employee retention are becoming more important throughout the healthcare industry. Many organizations have made drastic changes to increase the overall safety and satisfaction of their patients by ensuring best practices during clinic flow. Outpatient clinics have been evolving and are a major focus in the way we deliver care. Standard protocols for training purposes, daily workflows, and streamlining processes for accurate patient documentation can all result in an optimal healthcare delivery system. This paper will further explain this initiative and what impact it will have on ensuring best practices through patient safety, satisfaction, financial stability, and employee retention. This topic is relevant to public health because it directly impacts the patient's care and delivery, which affects their overall health status.

Table of Contents

Acronyms/Abbreviations.....	ix
1.0 Introduction.....	1
1.1 Project 1: Ensuring Best Practices During Clinic Flow- Importance of Standardizing Clinic Processes.....	2
1.1.1 Problem Statement.....	2
1.1.2 Purpose Statement	2
1.1.3 Introduction and Background	3
1.1.4 Methods.....	3
1.1.5 Results and Discussion.....	5
1.1.6 Recommendations	7
1.1.7 Competency Development	7
1.2 Project 2: Ensuring Best Practices During Clinic Flow- Department Policy Manuals and Training Guides.....	10
1.2.1 Problem Statement.....	10
1.2.2 Purpose Statement	10
1.2.3 Introduction and Background	10
1.2.4 Methods.....	11
1.2.5 Results and Discussion.....	12
1.2.6 Recommendations	13
1.2.7 Competency Development	14

1.3 Project 3: Ensuring Best Practices During Clinic Flow- Clinical Information Reconciliation.....	16
1.3.1 Problem Statement.....	16
1.3.2 Purpose Statement	16
1.3.3 Introduction and Background	17
1.3.4 Methods.....	17
1.3.5 Results and Discussion.....	18
1.3.6 Recommendations	19
1.3.7 Competency Development	20
1.4 Conclusion	21
2.0 Figures and Tables.....	23
2.1 Figures	23
2.2 Tables.....	30
Bibliography	32

List of Tables

Table 1. Before Project Implementation.....	30
Table 2. After Project Implementation.....	30

List of Figures

Figure 1. PSR Time Spent Printing Per Year	23
Figure 2. Total Cost to Order Paper vs. Projected Costs.....	24
Figure 3. Total Cost to Order Labels vs. Projected Costs.....	24
Figure 4. Provider Face Sheet.....	25
Figure 5. PSR Training Guide Survey	26
Figure 6. PSR Training Guides Satisfaction.....	27
Figure 7. UPMC Policy & Procedure Manual	28
Figure 8. PSR Training Guide Survey	29
Figure 9. PSR Training Guide Survey	29

Acronyms/Abbreviations

<u>Acronym/Abbreviation</u>	<u>Definition</u>
CIR	Clinical Information Reconciliation
ENT	Ear, Nose, and Throat
HR	Human Resources
MA	Medical Assistant
PSR	Patient Services Representative
UPMC	University of Pittsburgh Medical Center

1.0 Introduction

Currently it is being reported that there is a public health crisis stemming from healthcare employee shortages (Ten Ham-Baloyi., Minnie, 2020). Studies show that these issues directly affect the overall function of the healthcare industry from safety concerns and financial structure. Immediate interventions to ensure appropriate processes are in place to protect the integrity of the healthcare delivery system are necessary. Many factors that involve patients, healthcare employees, and institutions alike are in jeopardy related to the current dilemmas facing healthcare as a whole.

Patient safety, satisfaction, financial stability, and employee retention should be standard objectives for an efficient outpatient clinic. Implementing standardized protocols for training purposes, policies for daily workflow, and streamlining accurate patient documentation can all result in an optimal healthcare delivery system. Having a work environment that lacks structure and support can lead to employee dissatisfaction, financial instability, and jeopardize patient safety. To achieve the above objectives, best practice standards need to be documented, communicated, and implemented as part of the daily expectation of the workflow.

Ensuring best practices in outpatient clinics should be implemented to improve patients' health outcomes, the overall quality of healthcare, and to strengthen the organization altogether. A best practice is more than practice based on evidence; however, it represents high quality care in order to obtain improved patient and health outcomes (Ten Ham-Baloyi., Minnie, 2020). It is important for both the administrative staff as well as providers to understand what constitutes the patient's experience to result in positive patient satisfaction and safety. The quality of care and best

clinical practice can ultimately lead the organization to survive financially in today's healthcare environment.

1.1 Project 1: Ensuring Best Practices During Clinic Flow- Importance of Standardizing Clinic Processes

1.1.1 Problem Statement

During my residency experience, I worked in the Department of Otolaryngology that encompassed five outpatient clinics, 32 providers, 12 front office staff, 30 clinical staff, and eight administrative staff. Even though the office utilized a paperless medical record system, there was an extensive amount of printing of patient information and labels. As a result, this led to an increased workload for front office and clinical staff, the potential for medical errors and wasteful spending across the department (*Improving clinical workflow, 2014*).

1.1.2 Purpose Statement

The initial project was to abolish unnecessary printing and streamlined check-in and check-out processes across the clinics. The goal of the project was to reduce costs, which was achieved by decreasing paper, labels, ink, and increasing efficiency. In addition to financial stability, the streamlining of front office work objectives improved productivity, work satisfaction, employee retention, and the ability to function more efficiently.

1.1.3 Introduction and Background

Patient services representatives (PSRs) play a critical role in the everyday tasks that keep an outpatient clinic running smoothly. PSRs serve as the first point of contact for patients when they enter a facility performing duties such as greeting patients, checking them in, updating patient information including demographics and insurance, collecting payments, assisting with necessary paperwork, and fulfilling other customer service or front office duties (*What does a patient access representative do, 2021*). In the Department of Otolaryngology, there are four outpatient clinics located around the Pittsburgh area and one in the Northwest region of Pennsylvania employing ten PSRs within the clinics. The workplace responsibilities of PSRs vary to some degree from one setting to another, however, each clinic developed their own processes, which led to a disconnect in effective workflows.

1.1.4 Methods

Prior to starting this project, I worked as a PSR at four out of five of our clinic locations and saw many differences in the check-in and check-out processes as well as clinic flow. As I went from clinic to clinic to receive PSR training, I started collecting feedback by each PSR in the way their clinic performs certain front desk duties. When talking through the tasks with each employee, I also received positive and negative comments about what works best and what areas need to be improved to fully satisfy the needs of the patients and providers. For example, one clinic would verify the patient's personal information such as date of birth, address, and pharmacy at the time of check in while other clinics overlooked this step. This is an important task to be performed at the time of check-in as we need to collect and record the most up to date information in the patient's

chart. Another difference that I saw amongst the clinics was the amount of paperwork being printed at one location versus the other. The paperwork being printed showed the patient's medications, allergies, pharmacy, problem list, and medical history on it for the medical assistants (MAs) to verify when they room the patient. Verifying this information is an important step to rooming the patient, however, all this information can be found in the patient's chart using their electronic medical record system. To follow best practices following UPMC guidelines, patient labels must be displayed on every piece of paperwork that contains patient information. As more paperwork is printed for each patient, it results in a greater number of labels being used as well. Not only did this allow for an excessive amount of unnecessary printing, but it also took time away from the PSRs, interrupting the clinic's flow (*Clinical standardization, 2019*). Additionally, I was concerned with the difference in patient flow between the clinics. Some clinics had a face sheet that moved with the patient and documented the care received and any follow-up instructions after being seen by the provider, while other locations verbally told the patients this information. This inconsistency resulted in negative patient flow by interrupting the provider to communicate the follow-up care to the PSRs or relying on the patients to tell the PSR at the time of check out. This led to incorrect scheduling due to miscommunication between the providers, PSRs, and patients. There was also security awareness of patient information between the clinics. The more documents being printed out containing patient demographics and information, the higher chance there was of a HIPAA violation.

Above are just a few examples of the discrepancies that I saw amongst our clinics, however, as a department under the same leadership team, clinic processes should be standardized. As these differences were identified and approved by department leadership, my first project during my residency arose. The first step as leader of this project was to meet with each site manager and

obtain an understanding of why their clinic performs each task the way they do. In comparing how other clinics perform the tasks and generating an understanding of the differences, I proposed for the tasks to be standardized at each location. Focusing on one clinic at a time, changes were implemented, and clinic flow was improved.

1.1.5 Results and Discussion

The first major change was eliminating the unnecessary amount of printing of patient paperwork and labels. Before changes were implemented, clinics printed five to seven pages of paperwork and at least seven patient labels for each patient. Daily, our larger clinics see an average of 90 patients a day, which is roughly 540 pages of patient paperwork and 630 patient labels being printed daily. Our smaller clinics see an average of 50 patients a day, roughly 300 pages of patient paperwork and 350 patient labels being printed daily. The PSRs spent an average of an hour to two hours a day printing patient paperwork and labels in preparation for clinic. Due to the significant amount of printing and time it took the PSRs, a change was needed. After the project was implemented, PSRs now spend an average of 20 minutes compared to an average of 1.5 hours of printing daily. Figure 2.1.1 represents the cost before and after implementation that is spent on PSRs to print patient papers and labels. This figure represents a total savings of \$16,105 yearly and reduced the number of time PSRs spent printing by 105,000 minutes. These numbers were determined based on the group of PSRs who perform the printing, their midpoint salary, and the total number of minutes spent. This change allowed the PSRs to use their time more efficiently and increased workflows department wide.

In collaboration with managers, PSRs, and MAs, a process was implemented that resulted with the PSRs eliminating the unnecessary printing of patient paperwork and the MAs using the

computers in the room to verify the patient's information through the electronic medical record system. Before this project was implemented our clinics were spending an average of \$2,355.00 on paper and \$1,872.72 on labels each year. This data was collected by comparing previous supply orders over the past year until the new processes were implemented in August of 2022. As a result of these changes, we are projected to spend an average of \$1,570.00 on paper and \$936.36 on labels each year, a total savings of \$1,721.36 (figure 2.1.2 and 2.1.3). We projected these cost savings based on six months of data after the project was implemented. Since the project was implemented, we have seen a major improvement in process flow and believe that the department will continue to benefit from the best practices that were put in place.

Another major change was implementing a face sheet to help clinic flow for patients. One clinic was already using this face sheet to help navigate the patient's care and communicate any follow-up instructions, so this idea was shared and implemented department wide. Figure 2.1.4 displays an example of the face sheet that was implemented in our clinic to help document which provider the patient is seeing, vitals, follow-up instructions, and internal referrals if necessary. Implementing this change allowed for better communication between the patient and the provider as well as a more standardized clinic flow from the providers, MAs, and the PSRs.

I was able to standardize the workflows across the clinics, however a possible bias with this project could be through the sizes of our offices. For example, some of our larger clinics double in size and staff compared to our smaller clinics. With that being said, our clinics will never be comparable, and the workflows must change slightly. Due to this, I would recommend implementing two different workflows, one for our smaller clinics and one for our larger clinics so our department can still be streamlined.

1.1.6 Recommendations

One suggestion to enhance the efficiency of this project would be to further promote patient portals such as MyUPMC in order to communicate paperwork with patients prior to the in-person visit. Due to the high volume of patients our department sees daily, the front office gets very busy. Communicating the full functionality of MyUPMC will give patients the option to fill out their paperwork prior to coming to the visit which will eliminate them from having to wait in line to get checked in by a PSR. This will enhance the clinical flow of the waiting room and free up time from the PSRs to help other patients in time of need. This will also increase patient satisfaction and reduce wait times.

Due to this project being successful, a further recommendation of mine would be to standardize the PSR and MA responsibilities across the clinics. Currently, the tasks between our front office staff and medical assistants vary between clinics such as scanning paperwork, documentation, checking patients out, and coordinating follow-up tests. The tasks listed above are things that the PSRs and the MA team share, however, I feel that by standardizing the duties can help the clinic by specifically assigning these roles across the two teams. Overall, I am very happy with the results and the improvement of this project, but this is just the beginning. It made department leadership more aware of the discrepancies across the clinics and allowed for opportunities and improvement beyond the initial scope of this project.

1.1.7 Competency Development

Throughout the completion of this project, there were numerous competencies and skills that were obtained such as communication, professionalism, self-development, organizational

awareness, and financial skills. I was able to enhance my communicative competency by articulating ideas clearly and effectively in written and oral forms to PSRs and administrative staff throughout the department. Due to the five clinics being managed by different administrative staff, communication had to be apparent. As this project was new to the clinics and changed the way clinic flowed, there were many uncertainties. Without effective communication, it might not have yielded the same results. Furthermore, I led the department in an organized and goal-oriented manner that allowed the ability to apply skills that ultimately produced successful outcomes with clinic standardization.

Professionalism was met through leading and collaborating with the PRS and site managers while having the ability to prioritize, plan, and manage work effectively in order to produce high quality results. I was able to promote development that aligned with the department's goals and objectives. Due to this project affecting clinic flow, the trial runs were performed when providers were seeing patients. If this project was not thoroughly planned and implemented correctly, it could have disrupted patients and led to patient dissatisfaction. Partnering with administrative staff, PSRs, and MAs prior to implementing this project in clinic, the outcome was very successful and there was no additional disruption with patients and providers.

In addition to professionalism, self-development was established through the ability to seek feedback on the strengths and weaknesses throughout the project from administrative staff, PSRs, and the MA team. Also, having the ability to identify and address the clinic's needs through self-directed learning and implementing new approaches to clinic flow enhanced this competency. Every month, the administrative staff and I had a meeting to discuss the changes to the clinic flow, what works best, and what needs improvement. Having this opportunity to reflect on the project

allowed me to get feedback and problem solve areas that needed improvement. This was a great way to enhance my self-development skills and adapt to criticism from others.

Organizational awareness was strengthened by understanding the different components amongst the clinics and adapting to best practices for the department. This competency was also improved by learning the formal and informal decision-making structures and identifying key decisions that worked best for the clinics. Being the lead on this project, I was faced with difficult decisions, adapting to the needs of the clinic, and the flow of patients. As challenging as this was, it tested my ability to make quick decisions and implement changes in a timely manner.

Lastly, financial skills were enhanced throughout this project by gathering receipts from ordering computer paper, labels, and other office supplies from previous years. I took this data and compared it with previous office supplies orders. This was challenging because it was not my responsibility to order the supplies, so I was unaware of how much were ordered every couple of months. After collaborating with other PSRs who were familiar with this process, we concluded that this project reduced printing of paper and patient labels significantly. In the past, finance has typically been my weakness, however I can proudly say my skills in this competency increased tremendously.

1.2 Project 2: Ensuring Best Practices During Clinic Flow- Department Policy Manuals and Training Guides

1.2.1 Problem Statement

In keeping with the goal of improving workflow, the second problem area identified was the lack of communication and inconsistency of training guides and department policies across the five outpatient clinics. Due to this, there was an increase in employee dissatisfaction and turnover rates (Willard-Grace, 2019). Currently, the department uses a training binder that houses training documents; however, it is not utilized by the front office staff efficiently.

1.2.2 Purpose Statement

A significant expense to outpatient clinics is training new employees and not being able to retain them. With the project that I developed, specific training guidelines and protocols which serve to make sure everyone received the same training, and all work responsibilities were reviewed with new employees. This served as a clear job outline and a reference throughout the front office for staff to reference. Having clear expectations that are communicated appropriately at the initial employment will result in improved job satisfaction and retention of employees.

1.2.3 Introduction and Background

Employee retention can be defined as an organization's ability to keep its employees. Whether you have high or low turnover, you can prevent top talent from leaving with the right

practices and strategies (Workplace, 2021). According to Quantum Workplace, replacing employees is expensive, with costs ranging anywhere from 16% to 213% of an employees' salary (Paulsen, 2022). With that being said, the Department of Otolaryngology wanted to ensure current and new employees were receiving the appropriate training across the department while ensuring satisfaction during onboarding.

1.2.4 Methods

My role in this project was to update the current training binder and create a place to house the documents so that employees can reference in time of need. The first step in this project was to develop a standardized training program for the PSR team. We identified a lack of training amongst PSRs, especially after the clinic standardization project was completed. With the changes to the clinic processes, a guide was established and shared amongst the managers and PSRs to document the new changes and lead the employees to success. In collaboration with site managers, I shadowed each clinic and became familiar with the current training process and identified ways to improve across the department. Upon review, I noticed that each site developed their own way of training PSRs and did not have a standard guide in place. This resulted in discrepancies in the way PSRs performed front desk tasks and essentially made it difficult for employees to switch from clinic to clinic when understaffed. This had a negative impact on employees' satisfaction and made it hard to fill the front desk position when an employee called off work.

The next step in this project was to develop an onboarding guide for all new hires and current employees to be able to reference and stay up to date with current UPMC and department policies. Previously, when an employee was onboarded with the department, the manager would hand them a binder full of policies that the new hire would study and sign upon review. This was

not an efficient process due to not providing the employee with the most recent information. UPMC policies are housed on the Infonet, the internal website page for current employees. These policies are updated by Human Resources often; however, they are not communicated to the department when changes are made. If the department was not aware of the changes, the employee would not receive the most up to date information. Additionally, department policies that were created by the Department of Otolaryngology were established many years ago and have not been updated since. My role in this project was to develop a shared Microsoft Teams folder that housed the most up to date UPMC and department policies that employees can access at any time.

1.2.5 Results and Discussion

Table 2.2.1 represents the previous process in which the training guides and policy manuals were updated by each site manager. Before project implementation, administration would communicate changes to each site resulting in all five managers ultimately doing the same work. Each site manager would then update the manual binder and distribute it to all employees, ensuring they are up to date with any changes. After project implementation, administration communicates any changes to the site managers and one person in the department is responsible for updating the electronic training guides and policy manuals and sharing with all staff in the department (table 2.2.2). This new process streamlined communication across the department and eliminated each manager's time spent updating their clinic manual.

Upon completion and implementation of the training guides, a survey (figure 2.1.5) was sent to all PSRs. Across the department, 10/12 PSRs ranked the training guides seven or above, indicating that they benefited from this project, and provided positive feedback to back up their rankings (Figure 2.1.6). A key takeaway from the feedback received was that these training guides

were not only for new employees, but long-term employees benefited from them as well. A common theme that I saw amongst the surveys was the lack of communication about where documents were being stored and how often they were updated. Due to the shared folder that I created, it allowed all documents to be stored in one place and linked to the UPMC HR website so the PSRs can be able to access the updated documents at any time.

In continuation with the shared training guides, a shared folder was created to house all UPMC and department policies as well. A checklist (figure 2.1.7) was created and shared with all site managers to use when onboarding a new employee to ensure they are reviewing all required documents. Prior to this, managers would have the employee sign a signature log for each policy to indicate that they reviewed all department and UPMC policies. The positive feedback that I received with the checklist was that the employee only needed to sign one document once all policies were reviewed instead of multiple signature logs. Additionally, this checklist made it easier for the site managers and administration to keep track of the documents reviewed by the new employee.

1.2.6 Recommendations

For this project to remain successful, one recommendation would be to appoint a person within the department to review and update the PSR training guides as needed and once a year to ensure new hires are receiving proper training during their onboarding period. Starting a new job can be very stressful for new employees, and the goal for this training guide was to make it as transparent as possible. Another recommendation would be to have the site managers meet monthly and talk about what works best for their clinic and what issues they are facing when

onboarding employees. This will allow the managers to bounce ideas from one another and implement changes as needed.

The department policy and checklist must continue to be reviewed and updated often by site managers and administration. My recommendation to keep these documents up to date is to maintain communication between the human resources department and review all department and UPMC policies at the beginning of each year. Reviewing this yearly will ensure employees are receiving accurate information and the department is able to make changes as needed.

1.2.7 Competency Development

Accountability, human resources management, performance measurement and process improvement, analytical thinking, and systems thinking are competencies that were strengthened throughout this project. Accountability was expressed during this project by holding the managers and employees accountable for their training and understanding of the department policies. My role was to create PSR training guides for new hires and communicate UPMC and department policies to all staff using a shared online folder. I was responsible for communicating the documents efficiently while the managers and staff are accountable for reviewing the shared folder and asking questions as needed.

The human resource management competency played a major role in this project. For our department to create the PSR training guides and the policy manuals, we had to understand what manuals were required or voluntary per UPMC protocol. In addition to the UPMC policies, the department created site-specific documents that all new hires need to review and sign during their onboarding period. Human resources were a great tool to use during this phase and strengthened my knowledge in this competency. I learned quickly that when a document needed to be updated

or changed, we had to communicate the change to HR to ensure our department remains compliant with legal and regulatory requirements. Additionally, staff development and the optimization of performance measures were shared with the Human Resources team, and I collaborated with administration to ensure best practices across the department.

Another major focus throughout this project was observing skills and best practices that contribute to the effectiveness of the department's success which was gained through performance measurement and process improvement. Performance measurement was utilized and strengthened throughout this project by collecting data and analyzing current practices across the PSR team. This competency was met through the development of the training guides and applying them to educate new and current employees in the department. Lastly, strengthening process improvement allowed me to effectively identify problem areas and establish an organized plan in order to execute the training guides into everyday tasks.

Throughout this project, I was able to break down problem areas and develop a solution through my analytical thinking skills. This competency was gained by seeking information from the administrative staff and developing a solution to better communicate it across the department. Additionally, I was able to comprehend the situation that the department was facing and break it down into different components, the training guides and policies. Analytical thinking was used by being able to identify the components and problem solve any underlying issues.

In continuation with analytical thinking, systems thinking was also strengthened by recognizing a problem and developing a solution. I was able to distinguish between individual and department goals. Additionally, this project allowed me to establish and implement a solution that was in the best interest of the employees and the department.

1.3 Project 3: Ensuring Best Practices During Clinic Flow- Clinical Information Reconciliation

1.3.1 Problem Statement

As an objective measure of the negative outcomes related to the lack of communication and training interdepartmentally, the third problem became apparent. The department received quarterly reports that reflected performance below system standards in clinical information reconciliation. Low CIR scores can have a direct impact on patient safety and satisfaction that the department wanted to avoid. Missed documenting diagnosis, allergies, and medications can all pose significant risk to both patient and providers (*Medication reconciliation - patient safety and quality, 2020*).

1.3.2 Purpose Statement

In collaboration with department managers and Epic analysts, a training protocol was developed to streamline the process of improved patient data reconciliation including medications, allergies, and problems areas. Holding employees accountable to ensure patient safety, decreasing medication errors, and missing documentation increases patient satisfaction and improves the overall competency of the practice.

1.3.3 Introduction and Background

Clinical information reconciliation (CIR) is the process of identifying the most accurate and inclusive list of patient's medications, allergies, and problems by comparing the medical record to an official list of the same items obtained from a patient and or another provider. (*Medication reconciliation, 2014*). Reviewing a patient's medication list consists of identifying the name, dosage, frequency, and route of each medication. Allergies are reviewed by asking the patient to verify any known allergies and their reaction. The problem list reflects current and active diagnosis or problems that the provider should be made aware of. The same continuity of care should be performed whether they are a new or returning patient. Clinical information reconciliation is designed to avoid the most common medical errors seen in misdiagnosis and medications (Brastauskas, 2022). This reconciliation should occur across multiple levels of the healthcare team. Initially the provider identifies the appropriate medications, allergies, and problem list, however, the clinical staff should review for any changes at every subsequent appointment (*Best practice medication reconciliation, 2018*). Office managers are responsible for reviewing data metrics, implementing training to improve performance, and holding individuals accountable.

1.3.4 Methods

Currently UPMC's metrics for measuring an individual's performance in this area are collected through data from every patient encounter. The current acceptable score is a minimum of 55% but we should strive for a goal of 75% compliance. Every quarter and at the end of the year, site managers and department leadership receive reports displaying individual metrics in two

groups; group 1 and group 2. As this report is received, site managers notify the individual with their current score and what they can do to improve during clinic. Typically, this metric was a low priority for individuals and the consequences of compliance were deemed unimportant. Upon review of the department performance, the scores reflected a significant inadequacy. In collaboration with the EpicCare team, I investigated data that was able to display which individuals were performing below standards. The state at which this was performed, there were six out of 32 individuals meeting the system standard in this metric; roughly 19% department wide. I informed the department managers of the implications of poor patient documentation in these specific areas. After educating and collaborating with managers and department leadership, I developed a protocol to re-educate group 1 providing them with instruction-lead online training with an EpicCare analyst. This training allowed the individuals to review areas of improvement and ask any questions they may have. I got great feedback after the training occurred, as many individuals in group 1 did not know this was a requirement they had to meet. I re-evaluated objective data after the training to measure the effectiveness of the program. To facilitate group 2's interest and performance, I felt that utilizing individuals from group 1 to work one-on-one with individuals from group 2 for training would be better received and respected.

1.3.5 Results and Discussion

As the training concluded with groups 1 and 2, I collected and analyzed the data to see if our individual metrics improved. Figure 2.1.8 shows the average score of everyone from group 1 and figure 2.1.9 shows the average score of everyone from group 2 from Q1 & Q2 to Q3 & Q4. As you reference the graphs below, you may notice that not all individuals from groups 1 and 2 are meeting the goal of at least 55%, however 23/32; an average of 72%, increased their scores

from the first half of the year to the second half of the year. Additionally, there was a 50% increase in group 1's scores and 12% increase in group 2's scores; a total increase of 62% across the Department of Otolaryngology. Although our department is far from perfect, the significant increase over the past year shows promise that the individuals will continue to work to improve their metrics.

Due to the significant improvement in metrics across the department with little education and training, I believe that the individuals were unaware of the current situation and not enough emphasis was put on the importance of this area. A possible bias of the current scores may reflect the fact that the problem was recently identified, and training was completed just prior to the data being collected in the 3rd and 4th quarters. The more time that evolves between the training and the data collection, the scores may slowly start to decline.

1.3.6 Recommendations

In review of the data, there was an overall improvement in compliance across group 1, however, a challenge still exists among the group 2 population. Hopefully, with continued awareness of the implications of missing or incorrect documentation, individuals will become more interested. Patients greatly benefit from accurate documentation and appreciate the attentiveness to changes that can be communicated amongst all aspects of their care.

As improvement is still needed, one recommendation could be to require those who do not reach an acceptable score to attend monthly training courses. Once the score is reached, the individual will no longer have to attend the competency training. Another recommendation for increased compliance is to initiate training with all new individuals. When onboarding a new individual, it is important to have an individual who is performing well above the standards to

explain the importance of clinical information reconciliation for each patient and the steps to complete the metrics in Epic. Ensuring new individuals get this one-on-one training within the first few months of their onboarding can eliminate bad habits and ensure CIR is being met to the best of the individuals ability.

1.3.7 Competency Development

Many competencies were strengthened throughout this project, and they were leadership, information technology management, strategic orientation, and community orientation. Identifying a need for leadership and influencing the individuals while explaining the importance of improving CIR scores was strengthened throughout this project. In order to be successful, the Department of Otolaryngology needed to appoint a leader to influence the individuals to strive for excellence and that person was me. Taking on the leadership role while educating the individuals helped maintain effective relationships between the department leadership and clinical staff.

Additionally, information technology management was utilized and improved by understanding the administrative and clinical components of clinical information reconciliation measures. The main technology used for this project was Epic, an electronic medical record system where documentation and patient information are stored. As the individuals were already familiar with the EHR system, Epic, it made it easier to help the individuals understand the tasks that were being missed and lowering CIR scores. Without the full functionality of Epic, the CIR scores and the collection of data could not be performed in the manner that they were.

Strategic orientation was strengthened throughout this project by identifying the strengths and weaknesses as a department and aligning them with our goals. Before taking on the lead role of this project, the groups and most administrative staff were not familiar with the full importance

of measuring and collecting the data. As I communicated and educated others in the department of this metric, we became more aware of the situation and where the groups should be performing at. Without strategically training and educating the groups and managers, the information never would've been communicated and strengthened department wide and individually.

Closely aligned with strategic orientation was community orientation and this was addressed throughout this project by identifying and aligning the organization's goal to our department's needs and values. Addressing the community's needs and educating the individuals of the importance of evaluating CIR scores was a goal of this project. When reviewing UPMC's best practices and informing the department of the impact this has on the community, this metric immediately became a higher priority. If an individual misses this step when examining a patient, the patient's information is not fully up to date and can lead to misdiagnosis and incorrect documentation in the future.

1.4 Conclusion

In my experience, evaluating the clinics in the Department of Otolaryngology, I was able to identify that they already had the necessary resources within the practice, but they were not effectively utilized. Implementing these projects was done with minimal additional financial implications. Identifying the root of the problem and developing a process that was suitable amongst the five clinics, I was able to yield positive outcomes, control finances, and improve best practices. Properly identifying the issue, conducting the correct investigation, and implementing a workable strategy that led to successful projects provided me with a great level of confidence. Today, more than ever we have choices when it comes to establishing a healthcare team. This

applies to both healthcare individuals and patients alike. The importance of instituting a healthcare system that focuses on best practices directly impacts the success of the environment. A well-run outpatient clinic leads to employee and patient satisfaction, employee retention, patient safety, and financial stability for consumers and organizations. I was able to implement best practices and improve clinic flow by utilizing the full functionality of the current resources within the clinics.

2.0 Figures and Tables

2.1 Figures

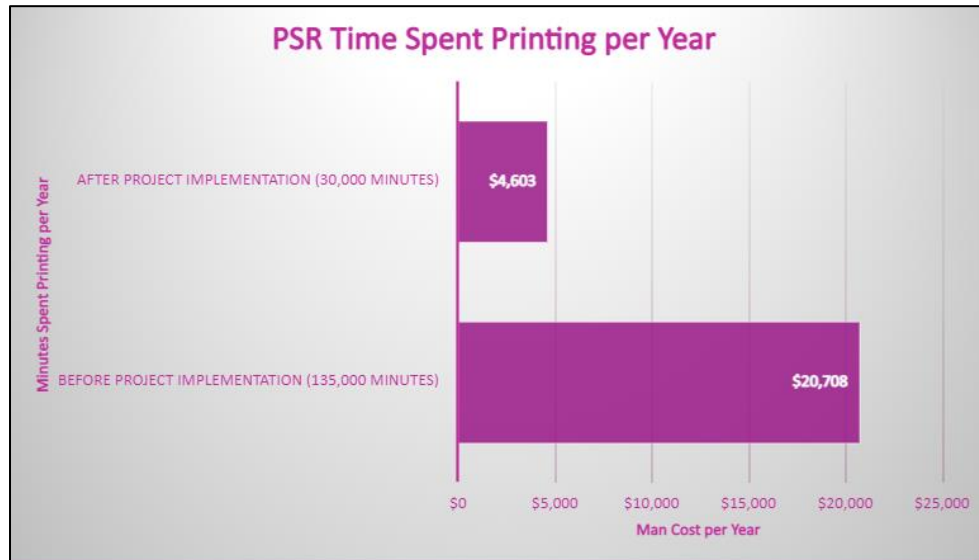


Figure 1. PSR Time Spent Printing Per Year

This figure represents PSR time spent printing and the cost associated per year to print patient paperwork and labels before the project was implemented versus after implementation.

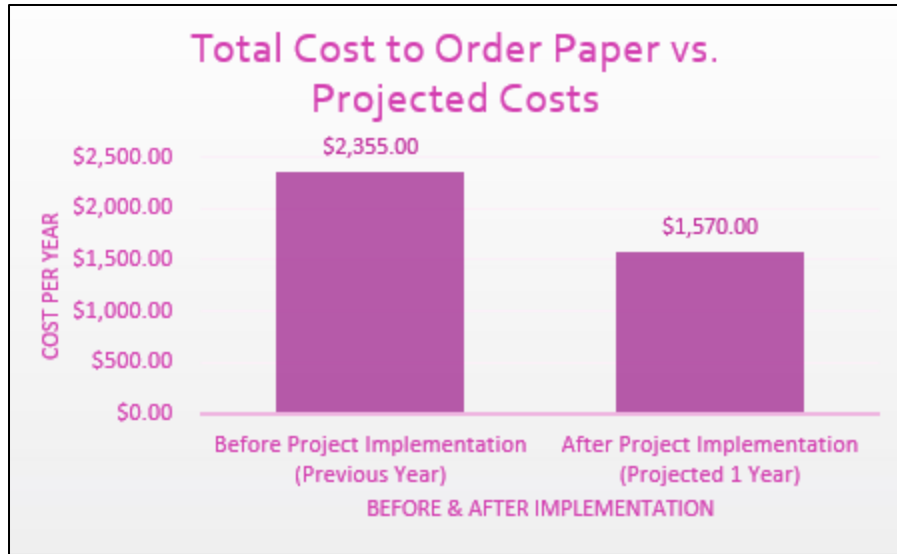


Figure 2. Total Cost to Order Paper vs. Projected Costs

This figure represents the price spent on paper before the project was implemented versus after implementation.

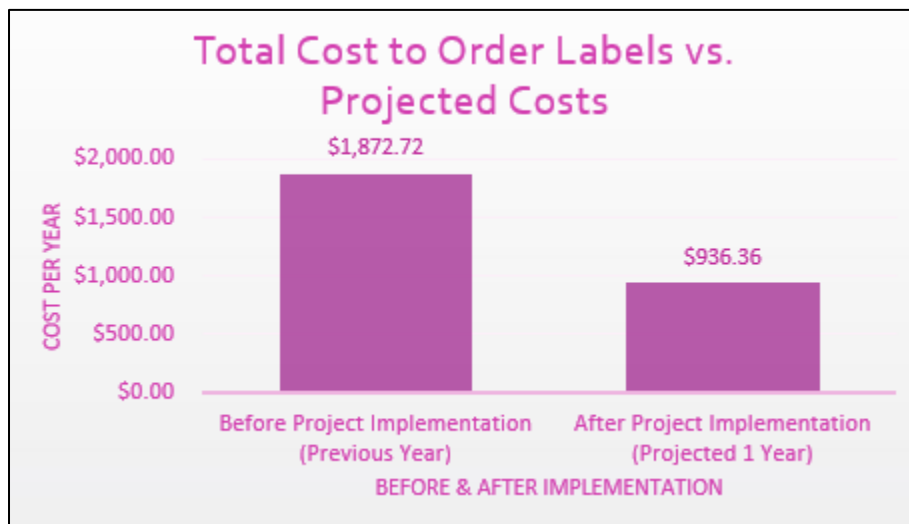


Figure 3. Total Cost to Order Labels vs. Projected Costs

This figure represents the price spent on labels before the project was implemented versus after implementation.

Provider

PATIENT LABEL:

VITALS

Height: _____

Weight: _____

AUDIO

Chief Complaint: _____

Audiogram: _____

Tymp: _____

OK to leave: _____

Need to be seen back: _____

Follow-up Instructions

Return visit: 3 months 6 months 1-year Telemed

Other: _____

Follow up with: _____

Internal Referral

Otology Head and Neck Voice Sleep

SHY Facial Plastics Skull Base

Other: _____

Figure 4. Provider Face Sheet

This figure represents the provider specific face sheet that was implemented in clinic to help clinical and patient flow.

PSR Training Guide Survey			
Please answer the questions below and circle the option that fits best.			
1.	Were you familiar with PSR duties/responsibilities before starting as a PSR with ENT?		
	NO	SOMETIMES	YES
2.	Have you had prior experience with Epic before starting as a PSR with ENT?		
	NO	SOMETIMES	YES
	If yes, to what extent: _____		
3.	Did you know where to find the most updated version of the ENT Master Phone List that has contact information for all clinics prior to the implementation of the training manual?		
	NO	SOMETIMES	YES
4.	Were you familiar with the Department of Otolaryngology Late Patient Policy and Procedure form prior to the implementation of the training manual?		
	NO	SOMETIMES	YES
5.	Did you know how to prepare the Epic DAR for new PSRs prior to the implementation of the training manual?		
	NO	SOMETIMES	YES
6.	Were you familiar with <u>ALL</u> ENT providers, specialties, and clinic locations prior to the implementation of the training manual?		
	NO	SOMETIMES	YES
7.	Did you feel comfortable scheduling for other clinics at all locations prior to the implementation of the training manual?		
	NO	SOMETIMES	YES
8.	Were you familiar with what insurances our clinics accept prior to the implementation of the training manual?		
	NO	SOMETIMES	YES
9.	Were you familiar with the ENT site-specific Emergency Response Plan?		
	NO	SOMETIMES	YES
10.	Please rate the training manuals from 1-10, 1 being not helpful at all and 10 being very helpful.		
	1	2	3
	4	5	6
	7	8	9
	10		
Please provide any recommendations below that will help make the PSR training guide more efficient for new employees:			

Figure 5. PSR Training Guide Survey

This figure represents the survey that was sent to all PSRs in the department.



Figure 6. PSR Training Guides Satisfaction

This figure represents the group of satisfied PSRs compared to the dissatisfied PSRs with the training guides.

UPMC Policy & Procedure Manual

Department of Otolaryngology Policy Checklist

All employees are required to read the policies and/or procedures listed below. Please sign this form acknowledging that this requirement has been met and return the form to your manager. Thank you.

- ☐ Absenteeism & Tardiness Policy**
- ☐ Fire Drill Process
- ☐ Follow-up Care After Instrumented Office Procedures/Post OP Surgical Care
- ☐ Guidelines for ASL Services & Visually Impaired
- ☐ Guidelines for Patient Procedures with High Risk for Adverse Reactions
- ☐ HIPAA Guidelines- Employee Access to EHR
- ☐ HIPAA Guidelines- Printed Patient Handouts & Mailings
- ☐ HIPAA Guidelines- Privacy Essentials
- ☐ Labeling Patient Cultures/Pathology Specimens & Delivery to Lab
- ☐ Late Patient Policy
- ☐ Orientation Period Policy
- ☐ Telephone & Cell Phone Use
- ☐ Value-Based Attendance Policy **

** Each employee will have a signed copy in their file/ signed master log

Employee Name: _____	Date: _____
Employee Signature: _____	Date: _____
Department Manager Signature: _____	Date: _____

Figure 7. UPMC Policy & Procedure Manual

This figure represents the department checklist that tracks the employee's completion of the policies above.

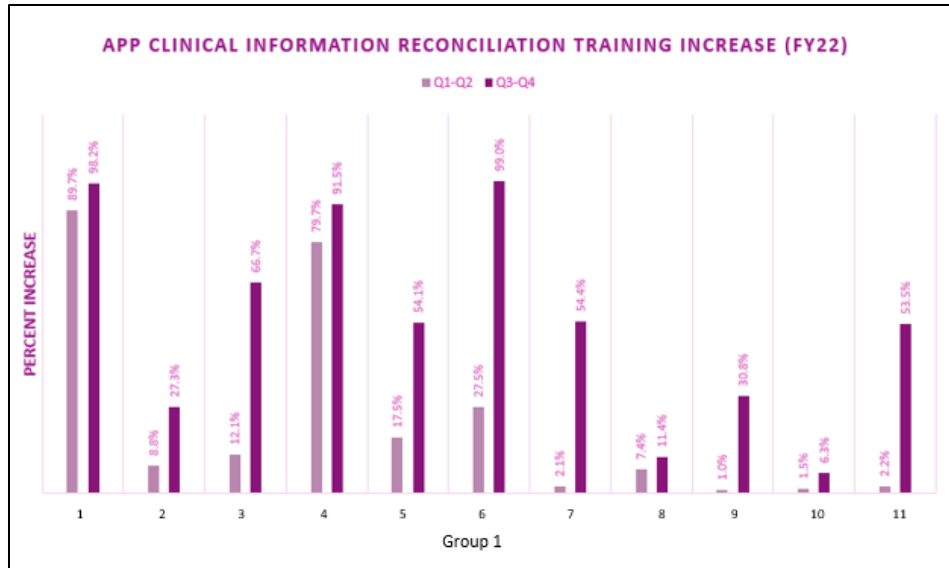


Figure 8. PSR Training Guide Survey

This figure represents the increase in quarters 1 and 2 to quarters 3 and 4 of clinical information reconciliation across group 1.

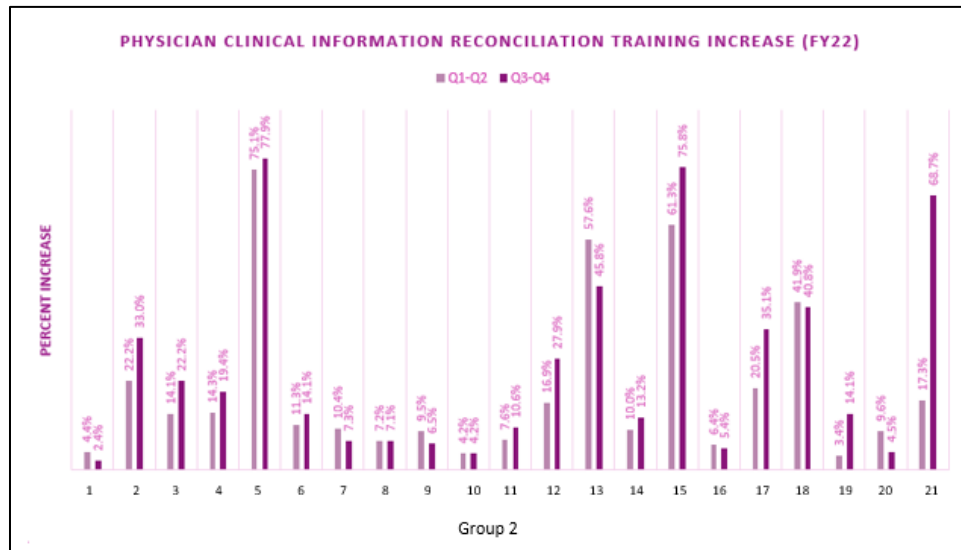
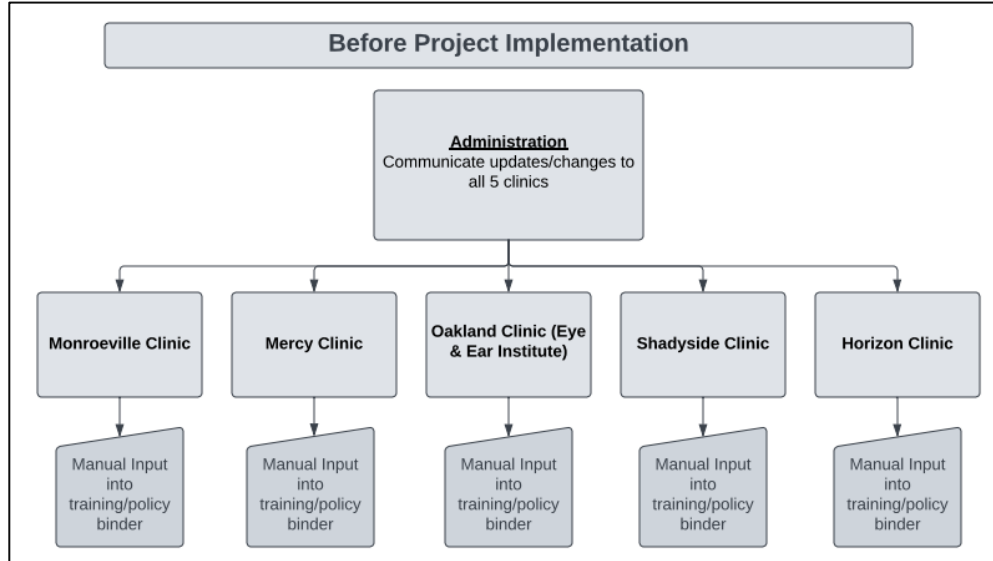


Figure 9. PSR Training Guide Survey

This figure represents the increase in quarters 1 and 2 to quarters 3 and 4 of clinical information reconciliation across group 2.

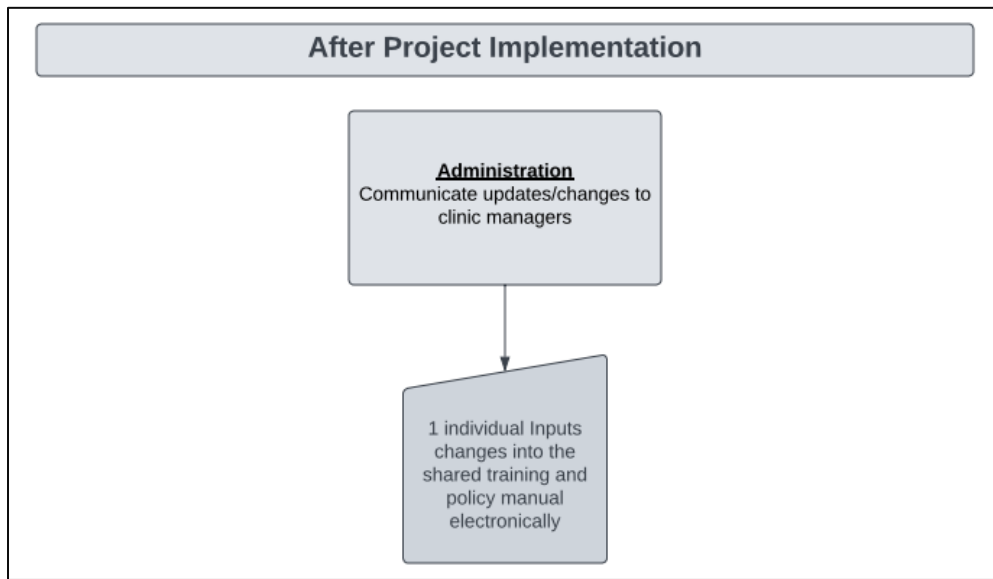
2.2 Tables

Table 1. Before Project Implementation



This table represents the process to update training guides and policy manuals before project implementation.

Table 2. After Project Implementation



This table represents the process to update training guides and policy manuals after project implementation.

Bibliography

- Best practice medication reconciliation in the outpatient setting - umass.* (2018). Retrieved January 23, 2023, from <https://scholarworks.umass.edu>
- Brastauskas, H. (2022, November 1). *The importance of a sound clinical reconciliation process.* MEDHOST The Importance of a Sound Clinical Reconciliation Process Comments. Retrieved January 23, 2023, from <https://www.medhost.com/blog/importance-sound-clinical-reconciliation-process/>
- Clinical standardization: The holy grail of modern healthcare: Amplion - nurse call systems.* Amplion. (2019, July 24). Retrieved January 24, 2023, from <https://amplioncare.com/clinical-standardization-the-holy-grail-of-modern-healthcare>
- Improving clinical workflow.* HIPAA Journal. (2014). Retrieved January 24, 2023, from <https://www.hipaajournal.com/improving-clinical-workflow>
- Medication reconciliation - centers for Medicare & Medicaid Services / CMS.* (2014). Retrieved January 23, 2023, from <https://www.cms.gov/Regulations-and-Guidance/Legislation>
- Medication reconciliation - patient safety and quality - NCBI bookshelf.* (2020). Retrieved January 23, 2023, from <https://www.ncbi.nlm.nih.gov/books/NBK2648/>
- Paulsen, E. (2022, July 13). *Why employee retention is important.* Employee Success Software. Retrieved January 25, 2023, from <https://www.quantumworkplace.com/future-of-work/why-employee-retention-is-important>
- Ten Ham-Baloyi, W., Minnie, K., & van der Walt, C. (2020, September). *Improving healthcare: A guide to roll-out best practices.* African health sciences. Retrieved February 27, 2023, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7751558/>
- What does a patient access representative do- job search |* (2021, April 5). Retrieved January 24, 2023, from <https://www.indeed.com/career-advice/finding-a-job/what-does-patient-access-representative-do>
- Willard-Grace, R., Knox, M., Huang, B., Hammer, H., Kivlahan, C., & Grumbach, K. (2019, January). *Burnout and Health Care Workforce turnover.* Annals of family medicine. Retrieved January 25, 2023, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6342603/>
- Workplace, Q. (2021). *How to reduce turnover in Healthcare.* Employee Success Software. Retrieved January 25, 2023, from <https://www.quantumworkplace.com/how-to-reduce-turnover-in-healthcare>