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April 2023
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Improving Identification of Prescriptions for Delivery via Patient Priority

Background:

City Center Drugs (CCD) is a family-owned independent pharmacy located at the District at Eastover in Jackson, Mississippi. CCD offers an array of extended services, including prescription delivery to patients residing within a 10-mile radius of the pharmacy. Currently, prescriptions for delivery are identified by placement in a designated clear tote; however, once the prescription label is printed, there are no identifiers on the label that prompt placement into these totes. CCD uses PioneerRx, a customizable pharmacy software available to independent pharmacies. By enabling the Patient Priority feature on PioneerRx, staff members can designate patients as one-time delivery or set delivery as their default. "Delivery" is then printed on the prescription label to ensure that prescriptions are placed in the appropriate totes to be delivered to prevent delays or interruptions in therapy.

Aim Statement:

An opportunity exists to improve the prescription delivery process beginning with enabling the Patient Priority feature on PioneerRx and ending with standardized prescription delivery designation through the identifier printed on the prescription label. This effort should improve prescription delivery identification for pharmacists, pharmacy technicians, and pharmacy students filling prescriptions. This process is important to improve now because it will prevent delays or interruptions in therapy for patients that do not have their medications delivered on time.

The baseline measurements are defined as the following metrics: number of delivery errors and staff satisfaction.

Benefit of Successful Completion:

- Standardized delivery designation and documentation
- On-time deliveries
- Increased patient and staff satisfaction

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Methods:

- Goal of Program:
    - To standardize prescription delivery designation and documentation to decrease delivery errors and increase workflow efficiency
- Timeframe to Achieve Goals:
    - February 2023-April 2023
- Issues to Address:
    - Delays or interruptions in therapy due to late delivery/pick up
    - Decreased patient satisfaction due to late deliveries or disruptions
    - Decreased staff satisfaction due to inefficiency
- Interventions Made:
    - Researched possible solutions to standardizing delivery documentation with PioneerRx and completed a test run at Flora Pharmacy, CCD's sister pharmacy
    - Enabled Patient Priority and "Delivery" printing on the label
    - Created a document with step-by-step instructions and trained staff

A delivery error log was used to tally the number of delivery errors. A staff satisfaction survey was distributed to all pharmacy staff including pharmacists, residents, and technicians. The survey consisted of four Likert scale questions on a 4-point scale, an assessment of how staff currently identifies delivery patients, and a comment section.

SWOT Analysis (strengths, weaknesses, opportunities, and threats):

Strengths
➤ Customizable pharmacy software
➤ Troubleshooting and training offered by PioneerRx

Weaknesses
➤ No consistent way to document delivery patients
➤ Pharmacy students that are not familiar with the patients

Opportunities
➤ Deliver medications on time
➤ Improve workflow efficiency and staff satisfaction
➤ Reduce gas costs due to multiple delivery runs

Threats
➤ Potential resistance from pharmacy staff due to time constraints
➤ Entering eRx and printing label before patient requests delivery

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Results and Conclusions:

Baseline data was captured 2 days per week for 4 weeks due to staffing availability. Post-implementation data was then collected 2 days per week over the following 4 weeks. Over the 2-month period, 9 delivery errors were reported at City Center Drugs, where 8 of these errors were reported before intervention. The overall number of delivery errors decreased by 87.5% after introducing Patient Priority and printing "Delivery" on the prescription label (Figure 1).

CCD staff members, including pharmacists, pharmacy technicians, and pharmacy residents completed a satisfaction survey prior to and after intervention. Before using the Patient Priority feature and printing "Delivery" on the prescription label, the majority of staff answered somewhat or strongly disagree to the four Likert scale questions characterizing satisfaction with current practices, efficiency of current practices, timely deliveries, and ability to identify delivery patients (Figure 2). After implementation, staff satisfaction shifted to somewhat agree or strongly disagree for most questions (Figure 3). Before intervention, 66.7% of staff reported relying on asking another staff member to identify delivery patients, which decreased to 28.6% after printing "Delivery" on the prescription labels (Figure 4).

In conclusion, we were successful in achieving our goal of decreasing delivery errors and increasing staff satisfaction by enabling Patient Priority and printing "Delivery" on each prescription label. The patient is more clearly identified as a delivery patient for the students and staff filling the prescriptions and selecting the appropriate tote. By streamlining identification of delivery patients, we hope to prevent delays or interruptions in therapy due to late deliveries and improve both patient and staff satisfaction through increased efficiency.
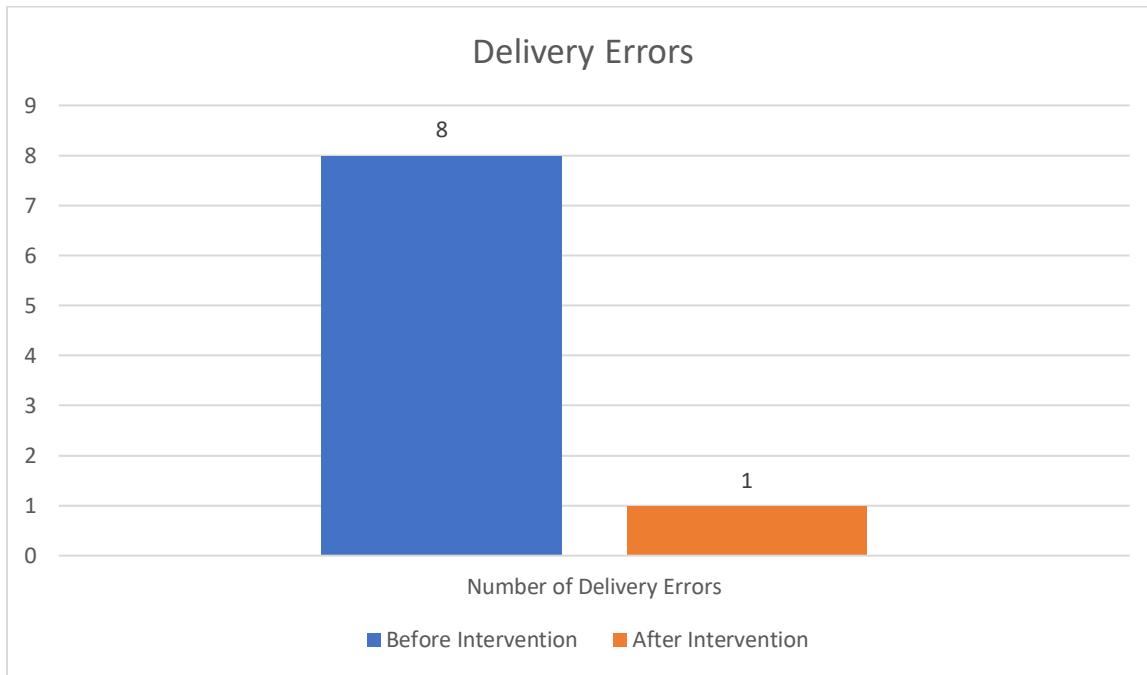
Figure 1

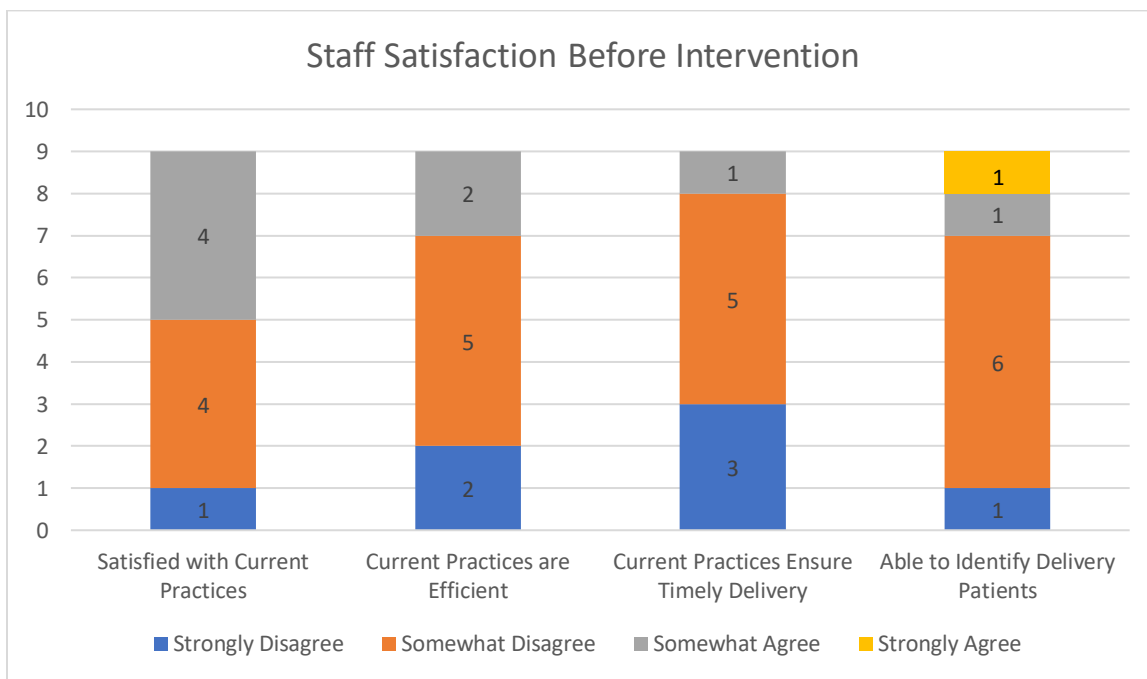Delivery Errors

Figure 2

Staff Satisfaction Before Intervention

Figure 3

Staff Satisfaction After Intervention

- Strongly Disagree
- Somewhat Disagree
- Somewhat Agree
- Strongly Agree

Figure 4

How Staff Identified Delivery Patients Before Intervention

- Familiarity with Patients/Memory
- Critical Note in Pioneer
- Asking Another Staff Member

How Staff Identifies Delivery Patients After Intervention

- Familiarity with Patients/Memory
- Critical Note in Pioneer
- Asking Another Staff Member
- Prescription Label

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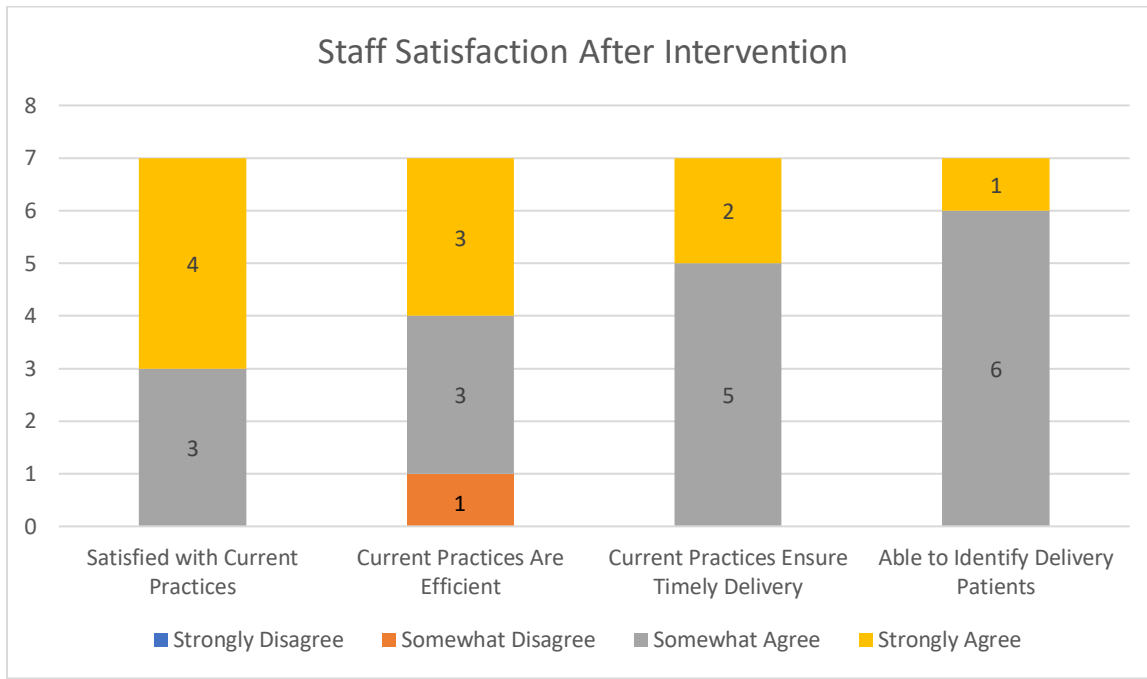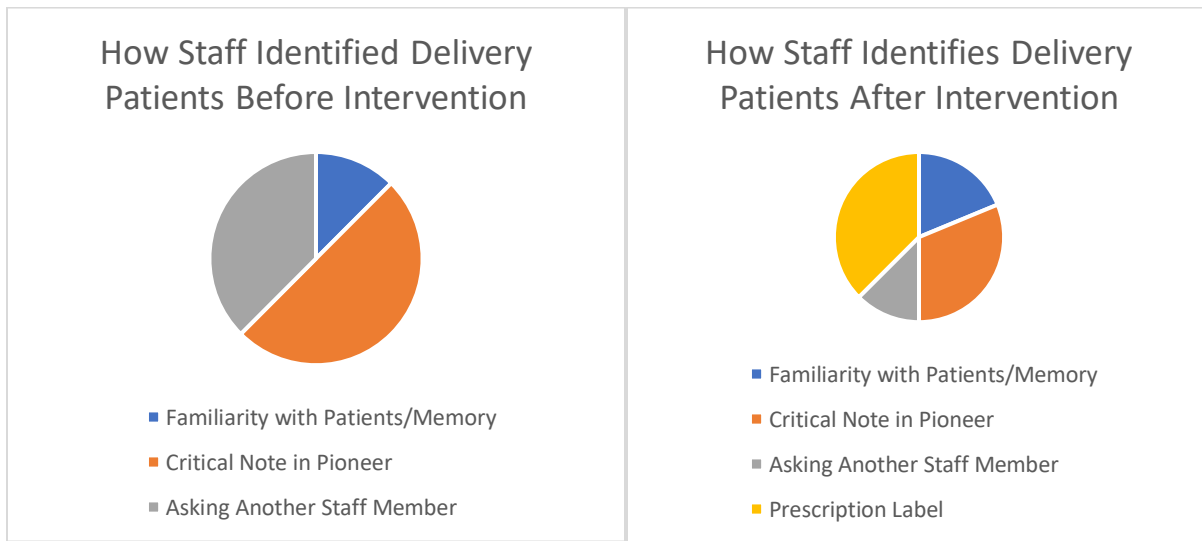
Discussion:

While the number of delivery errors could be skewed because data was only captured 2 days per week, this delivery identification tool does show benefit. We have identified one major barrier to identifying delivery patients with the Patient Priority feature on PioneerRx. The Patient Priority is usually only changed to "Delivery" if the patient calls to request delivery prior to entering their prescription in the system. If a patient calls after the electronic prescription is already entered and printed, "Delivery" will not appear on the label. There are three major ways to overcome this weakness: utilizing the print queue, setting the patient's default priority as "Delivery," and reprinting the label. Once a patient's prescription is entered and processed, it goes to the print queue which allows the pharmacy staff to address any issues that might delay dispensing. The prescriptions in print queue only print periodically or when a staff member selects them to be printed. Since prescriptions can be edited after they enter the print queue, the Patient Priority could be changed to "Delivery" after entering the prescription but before printing the label. If the patient is a regular delivery patient, the patient's Default Patient Priority can be set to "Delivery" on their profile so that all subsequent prescriptions received would be marked for delivery. It might be beneficial for regular staff to spend one day to change these regular patients' default priority in PioneerRx by utilizing familiarity with patients and Critical Notes that were entered identifying these repeat delivery patients. Finally, if the prescription label has been printed but not yet filled, the prescription label could be reprinted with "Delivery." As we continue to work to improve patient and staff satisfaction, we hope that data can provide us with more insight to make pharmacy processes even more efficient.