Improving Ambulatory Pharmacy Charges

Shawn Wood CPhT, Pharmacy 340B and Inventory Supervisor; Tiffany Truong, Pharm D Candidate; Parth Patel, BSN, RN Senior Data Analyst

Beth Israel Deaconess Medical Center- Boston

Introduction/Problem

Most charges for medications at BIDMC are captured automatically whenever a medication is dispensed or administered to a patient via our electronic physician order entry and pharmacy processing systems.

Charges for medications dispensed or administered in outpatient units or clinics are entered manually by staff who may not understand how to enter the charge. Such errors could impact the revenue cycle, and if part of the 340B program also affect drug supply costs and compliance.

Further, pharmaceutical costs at BIDMC clinics alone have grown from approximately $2 million in FY12 to an expected $11 million in FY18. The potential implications associated with charging errors increases when even more dollars are anticipated. With 100,000 pharmacy charges per week across the medical center, a manual audit to ensure capture of all pharmacy charges is labor prohibitive.

Importantly, success of the hospital's internal 340B program depends on accurate charging for medications dispensed so that pharmacy can continue to make purchases at the best contract prices through this program. It is critical that we work toward creating a system that will accurately and reliably allow us to capture charges for all doses dispensed to our clinic patients.

Aim/Goal

To reduce medication billing errors, increase awareness how pharmaceutical charges affects drug costs, and highlight the nuances to clinic's pharmacy charge entry that may not be intuitive.

The Team

- Shawn Wood CPhT — Pharmacy Inventory Supervisor
- Tiffany Truong, Pharm D Candidate — Pharmacy Intern
- Parth Patel, BSN, RN — Senior Data Analyst

The Interventions

- Completed a database of clinic charge codes, each with charge logic for the dosing range of the medication it is charging
- Created a process to automate a comparison of this charging logic against weekly dispensation reports to identify errors
- Collaborate with Revenue Cycle to correct billing errors
- Increase awareness to Directors, Practice Managers and front line staff in Clinics for improvement opportunities

Results/Progress to Date

OCTOBER 2017- JANUARY 2018 Results	
9K	Number of Dispensations Reviewed
$3.6M	Total Cost of Pharmaceutical Dispensations Reviewed
149	# Charge Errors Identified
$22K	Increased Pharmaceutical Expense due to Errors
$56K	Cost of Pharmaceuticals Undercharged
$236K	Cost of Pharmaceuticals Overcharged

For more information, contact:

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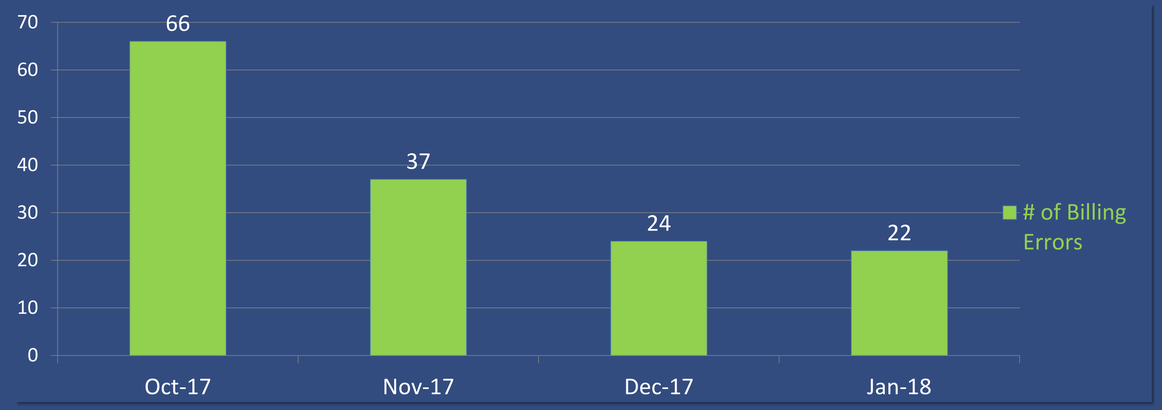
More Results/Progress to Date



Charging errors identified over time.

# of Errors	Medication
47	Omalizumab Inj. (Xolair)
25	Medroxyprogesterone Acetate Inj. (Depo-Provera)
20	Hydroxyprogesterone Caproate Inj. (Makena)
20	Mepolizumab Inj. (Nucala)
14	Onabotulinum Toxin A (Botox)
8	Ketorolac Inj. (Toradol)
4	Betamethasone Inj. (Celestone)
4	Aflibercept Inj. (Eylea)

Number of instances of charging errors for each medication identified. Medications with only 1 or 2 charging errors were not listed.

- Botox 100unit vial charges per unit
  - Charges are incorrectly entered per vial
- Xolair 150mg vial charges per 5mg
  - Charges are incorrectly entered per mg
- Makena 250mg vial charges per 10mg
  - Charges are incorrectly entered per vial
  - Charges are incorrectly entered per mg
- Depo-Provera 150mg vial charges per mg
  - Charges are incorrectly entered per mg

Description of Frequent Charging Errors

Lessons Learned

- Improving charges across the institution involves a great deal of reinforcement making 100% adherence difficult
- There are limitations to this review; While we can identify charges that fall outside dosing ranges, we can not automate the review to determine if the correct medication was charged or if a charge was not entered
- Our expectation starting this review was for billing errors to be predominately undercharges but results showed errors are just as likely to be an overcharge

Next Steps

- Continue the review of clinic charges to encourage the downward trend for charge errors
- Update logic periodically to include any newly added charge codes and medications
- Focus improvements for clinics with continued pockets of billing errors

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