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Transitions of care operations at a family medicine clinic: patient follow up and financial outcome analysis

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Key Words: Transition, billing, operations, outpatient

Definitions: TOC: Transitions of Care; CMS: Centers for Medicare and Medicaid; AAFP: American Academy of Family Physicians; COPD: Chronic Obstructive Pulmonary Disease; CPT: Current Procedural Terminology

Abstract

Introduction: Coordinating smooth patient transitions remains a growing area of interest among healthcare professionals in light of the addition of the Readmission Reductions Program to the Affordable Care Act, which enables CMS to penalize hospitals for 30-day readmissions due to myocardial infarction, pneumonia, heart failure, and in due time, COPD.² Many facilities have tested varying TOC models previously piloted at other institutions, focusing on ensuring the proper measures are in place before patients depart. However, there is a significant lack in data quantifying the rate of timely patient follow up after discharge, despite the evidence supporting the value of this visit. The purpose of this study is to analyze TOC outcomes at a local family medicine clinic to assess potential lack of billing utilization and gaps of care related to patient follow up. **Methods:** The investigators were provided with emergency department discharge charts from the local hospital affiliated with the family medicine clinic; discharge dates ranged from April 2014 to August 2014. Discharge charts were analyzed to establish medical complexity. Investigators used electronic medical records to extract descriptive data to analyze patient and financial outcomes. A subgroup analysis was performed utilizing a subset of patients identified as "established" at the clinic. **Results:** A total of 317 unique discharge reports were evaluated, with 104 of those in the "established" patient subgroup. During the study period, 8.8% of the total group of patients demonstrated timely follow-up. Additionally, rate of incorrect billing techniques was 79%. A consequence of the low percentage of patient follow up and improper billing is missed revenue opportunity for the clinic; financial consequences range from \$3,248.60-\$67,150 over the 5 month period. **Conclusion:** A coordinated outpatient TOC procedure cannot be determined from this study. However, need for further analysis of outcomes at outpatient facilities has been identified.

Introduction

The term "transitions of care" refers to the actions put into place to ensure continuity of care as a patient moves from an inpatient facility (ex. hospital) to an outpatient facility (ex. skilled nursing facility, home).¹ Coordinating smooth patient transitions remains a growing area of interest among healthcare professionals in light of the addition of the Readmission Reductions Program to the Affordable Care Act, which enables CMS to penalize hospitals for 30-day readmissions due to myocardial infarction, pneumonia, heart failure, and in due time, COPD.² As a result of the demand for quality improvement in patient transitions, many healthcare systems have begun evaluating outcomes associated with designing a structured transition and ensuring timely patient follow up post-discharge. In hopes of improving TOC operations, many facilities have tested varying TOC models previously piloted at other institutions. TOC models are designed to bridge the gaps between health care

professionals, patients and caregivers as the transition between facilities takes place. Each model differs in the approach to improve transitions; however, each model must contain the following components in order to submit for reimbursement using CMS transitional care billing codes: a direct patient phone call within 48-72 hours following discharge and a follow-up visit within 7-14 days post-discharge.³ A recent article published in the *Cleveland Clinical Journal of Medicine* highlighted the positive results of institutional trials utilizing select TOC models. One of the more successful models was The Care Transitions Program executed by Dr. Eric Cullman, which placed emphasis on empowering patients with knowledge and understanding of how to manage their healthcare.⁴ Results demonstrated that this program was associated with a decrease in 30- to 180-day readmissions and reinforced how vital educating patients and caregivers is in order to achieve better transitional outcomes.⁴ A second program highlighted with positive outcomes was Project RED (Re-engineered discharge), which placed emphasis on improving the flow of hospital operations at discharge.^{4,5} Results supported streamlining the discharge

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process as this correlated with a reduction in readmissions by 30%.⁵ It is also important to note that a common issue identified in a systematic review was the lack of adequate communication between healthcare professionals during the discharge process.⁴ Upon further evaluation, a critical component missing as a part of this communication deficit was pending lab and test results as well as recommended follow-up time.^{4,6} There is sufficient evidence to support the need for improvement with transitional care processes, particularly at discharge with both provider and patient/caregiver communication.^{4,7} Aside from the significant effects on overall patient outcomes, improving TOC operations may also prove to provide financial benefit.

Readmission costs account for the large financial aspect of transitions for hospitals; respectively, billing for follow-up visits after discharge is the outpatient revenue associated with coordinating patient transitions. Prior to scheduling a follow-up visit, a patient's medical complexity must be assessed and deemed high or moderate complexity; this determines the allotted time frame between discharge and follow-up (7 or 14 days). With regards to billing, if a patient is categorized as moderate and follows-up within 14 days of discharge, the CPT code 99495 may be utilized; reimbursement rates are ~\$190 per visit. If a patient is categorized as high complexity and follows-up within 7 days of discharge, the CPT code 99496 may be utilized; reimbursement rates are ~\$280 per visit.³ Outpatient clinics can certainly measure financial benefit in both facilitating timely patient follow up providing billing personnel utilize the correct CPT codes.

It is evident that a number of factors that constitute a successful patient transition are influenced by the operations at the partnering outpatient clinic. However, there is a significant lack in useful data identifying issues within the outpatient transitional care practice models. Evaluating the rate of timely follow up as well as the TOC billing operations at an outpatient facility would provide further information to help determine if an issue at the point in the transition is present. The purpose of this study is to analyze TOC outcomes at a local family medicine clinic to assess potential lack of billing utilization and gaps of care related to patient follow up.

Methods

Approval from the Institutional Review Board of the health system over the family medicine clinic was obtained. The investigators were provided with emergency department discharge charts from the local hospital affiliated with the family medicine clinic; discharge dates ranged from April 2014 to August 2014. The diagnosis and discharge notes were used to determine medical complexity in order to establish an appropriate allotted time interval between discharge and

follow-up visit as well as the correct CPT billing code that should have been submitted for that visit. To assist in determination of medical complexities, the investigators utilized the AAFP Transitional-Care Management Worksheet in conjunction with professional input from the family medicine physicians acting as investigators of this study; approximately sixty-two charts required assistance from physician investigators due to complexity of discharge records.⁸ If complexity of the patient remained unclear, moderate complexity was recorded in order to underestimate potential revenue as opposed to overestimating. Patients were classified as "established" or "new" by using a pre-determined definition: patients were deemed "established" if they had at least one visit within the past two calendar years or had followed up with the clinic post-discharge at any point during the study date range, while the remainder of patients were considered "new." This allowed investigators to identify a subgroup of patients that were most likely exclusive to the practice to allow for data analysis apart from the larger group that may include patients with an established primary care physician separate from the study clinic.

Investigators used electronic medical records to extract data assessing the following endpoints: billing practices including reimbursement attached to each code and if the correct code was utilized, number of patients who demonstrated timely follow up, quantified discharge diagnosis, and patient status "new" or "established." Patients discharged to hospice were excluded from the study. The descriptive data was recorded in a password-protected excel spreadsheet and all data was analyzed by the investigators using excel formulas. Two primary endpoints were assessed to evaluate two separate components of the transitional care process at an outpatient facility: percentage of patients who returned to the clinic within the allotted time frame and percentage of those visits that were billed incorrectly. Secondary outcomes evaluated were: 1.) Monetary loss associated with lack of patient follow-up, 2.) Monetary loss associated with incorrect billing code submission, and 3.) Potential revenue had all patients demonstrated timely follow-up and had those visits been billed correctly. A separate analysis was performed on the subgroup of "established" clinic patients.

Results

A total of 317 unique discharge reports were evaluated, with 104 of those in the "established" patient subgroup. Of the 317 patients, 170 patients were determined to be moderate complexity and 147 were deemed high complexity. Of note, the two most common discharge diagnoses were chest pain and COPD exacerbations. Furthermore, 4% of diagnoses were due to myocardial infarction, 5% were pneumonia, and 4% were heart failure exacerbations. Analysis revealed that between the months of April and August 2014, 8.8% of the total group of patients returned to the clinic within the

allotted amount of time pre-determined based off medical complexity. Further analysis revealed 44 patients returned to the clinic after the recommended date, and 245 patients did not follow-up with the clinic at all. Subgroup analysis results as well as whole group results can be found in table 1.

A consequence of the low percentage of patient follow-up is missed revenue opportunity for the clinic. Had the 245 patients that did not return to the clinic actually followed-up appropriately, the clinic could have earned estimated revenue of \$67,150 on TOC visits alone within the five-month period (Table 2).

With regards to billing outcomes, the 28 claims associated with patients who demonstrated timely follow-up were analyzed to assess if TOC CPT codes were appropriately utilized. Data revealed that 79% of those claims were billed incorrectly using regular clinic visit CPT codes. The investigators compared reimbursement amounts for clinic visits to that of TOC visits to assess for lost revenue from incorrect billing practices. Given that reimbursement for TOC visits is much higher than that of regular clinic visits, the excess amount that the clinic could have been paid was \$3,248.60 for those visits. For better reference of CPT codes erroneously used in place of TOC CPT codes and billing amounts associated with, please refer to Table 3. It should be noted that all claims submitted for reimbursement using TOC CPT codes were submitted and paid in full by a variety of third parties including, but not limited to: BlueCross BlueShield, VIVA, Medicare, Medicaid, United, Aetna, Health Springs, Humana, ACI, AARP, and TriStar.

To gain a larger perspective of potential TOC revenue that the clinic could have appreciated, the investigators evaluated potential revenue assuming all 317 patients returned within the selected time frame and all claims submitted with accurate CPT codes; the potential revenue was \$73,460.

Discussion

The results of this study revealed tremendous missed opportunity to capitalize on both the patient care and financial aspects related to TOC. This data facilitated a critical review of the TOC outcomes at this outpatient clinic so that gaps within the process could be identified and further improved upon. Although a large amount of information is available supporting the need for timely follow-up, there is a lack of data describing the TOC outcomes of other family medicine clinics.^{9,10}

The post discharge follow-up visit is not only required for billing purposes, but also plays a major role in allowing patients the opportunity to ask questions and receive medication counseling. Of note, an estimated 20% of all adverse drug events are related to poor communication at

the transitional point.¹¹ Furthermore, medication adverse events are a frequent cause of ER visits and hospital readmissions, reiterating the necessity of a timely follow-up visit post discharge.¹²

In regards to the healthcare system as a whole, evidence has clearly identified healthcare provider communication at the discharge point as a significant area lacking within patient transitions.^{4,5} Moreover, clear communication has been proven to actually aid in the reduction of hospital readmissions.^{4,5} At the healthcare system evaluated in the study, communication could be easily improved upon given the same physicians staff both the local hospital and clinic. Despite the fact that medical discharge summaries are readily available, they often lack key information such as primary problems during hospitalization and correctly reconciled medication lists. Providing a template prompting the inclusion of this pertinent information could assist in filling some of these information gaps. However, while ensuring continuity of care at the point of discharge carries a meaningful value in the framework of a smooth transition, without appropriate TOC processes outlined at the outpatient facility, many efforts in place could be futile.

The current protocol within the studied healthcare system begins at patient discharge. The resident physician will identify patients who are established with the clinic or those in need of a primary care physician; a definition of "established" is not specified in the protocol and should not be assumed to match that of the definition used in this study. At that time, the resident communicates with the scheduling nurse either directly or via the after-hours message line. Appointment availability is never an issue as these patients take priority to standard visits. A member of the nursing staff will attempt communication with the patient within 48 hours post-discharge to coordinate follow up, fulfilling the previously mentioned requirement for TOC billing purposes. Evaluating the current practice in correlation with the data from this study reiterates that many valuable processes are in place during earlier stages of the TOC protocol for the healthcare system as a whole, but little structure has been established on the outpatient side.

Additionally, the results of this study illustrate the significant financial consequences due to the lack of a better-coordinated TOC protocol at the clinic. The data depicts outcomes over five months. When extrapolating and taking into consideration the significant difference in reimbursement amounts between using regular clinic visit CPT codes and TOC CPT codes, annual loss associated with suboptimal TOC operations due to incorrect billing procedures alone would be approximately \$7,800.

Furthermore, by utilizing TOC visits and defining a process to identify these patients and ensure timely follow-up, the clinic has potential annual revenue of \$176,304. Given the large monetary value in ensuring TOC goals are met, consideration of a transitional-care coordinator may provide benefit and accountability for process improvement.

It is important to note the limitations of this study. Assessing follow-up rate of the included patients from other outpatient facilities was not feasible, and it is not probable to expect all patients discharged from the local hospital to follow-up with the affiliated primary care clinic. However, the subgroup of patients who were deemed “established” clinic patients provide a more definitive evaluation of the financial consequences association with a low percentage of timely follow up. It is also a potential limitation that the AAFP transitional-care worksheet is not a validated means for deciphering medical complexity; however, it acts as a structured guide for physicians in lieu of a validated tool.

The results of this study provide evidence to support the need for further analysis of the workflow of transitional care operations at other outpatient clinics. While recommendations for best practice cannot be made from this research, institutions can focus on improving rates of patient follow up visits and regular examination of CPT codes used in these visits to ensure correct billing and maximization of potential profit. Further investigation could reveal a best practice model for other outpatient facilities to implement in order to improve TOC outcomes as it relates to timely follow up and billing procedures as well as provide data to better analyze transitions of care operations as a whole.

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Table 1

Metric	Results: Total Group (n=317)	Results: Subgroup (n=104)
Percentage of timely patient follow-up	8.83%	26.92%
Number of patients who returned within their TOC allotted time frame	28*(8.83%)	28 (26.92%)
Number of high complexity patients who followed-up past their allotted TOC time frame, but within the moderate complexity time frame	14*(4.41%)	14 (13.46%)
Number of patients who followed-up outside of their allotted TOC time frame	44 (13.88%)	44* (42.31%)
Number of patients who did not follow-up at all with our clinic	245 (77.29%)	32 (30.77%)

* If claim details were analyzed, it indicates that the patient demonstrated timely follow-up and thereby meeting the criteria for the subgroup.

Table 2

Metric	Results: Total Group (n=317)	Results: Subgroup (n=104)
Percentage of visits billed incorrectly	79%*	79%
Revenue difference due to lack of timely patient follow-up	\$3,248.60*	\$3,248.60
Missed revenue opportunity due to lack of timely patient follow-up	\$67,150	\$17,860
Lack of follow-up moderate complexity	\$29,070	\$7,220
Lack of follow-up high complexity	\$38,080	\$10,640
Possible revenue if all patients had demonstrated timely follow-up and billing practices were accurate	\$73,460	\$24,170

* If claim details were analyzed, it indicates that the patient demonstrated timely follow-up and thereby meeting the criteria for the subgroup.

Table 3

CPT Code	Estimated Reimbursement Rate
99214	\$129
99213	\$85
99212	\$49
99204	\$187
99203	\$121
Lab	\$8
99495 (TOC Code)	\$190
99496 (TOC Code)	\$280

*A CPT (Current Procedural Terminology) code is used to describe medical, surgical and laboratory services of healthcare providers.