



Discharge Planning for the Patient With Chronic Pancreatitis

ABSTRACT

For patients with chronic pancreatitis, there are many ramifications of failing to plan for the patient's discharge appropriately. The chronicity of the disease often makes discharge planning more complex. In addition, patient needs may include complicated home regimens, psychosocial interventions, or both. Patients with chronic pancreatitis have disease-specific needs and issues that should be assessed to implement an appropriate plan. Resources need to be identified, implemented, and evaluated to ensure positive outcomes, adequate patient satisfaction, and lower readmission rates. This article presents the impact of chronic pancreatitis on the healthcare system, recommendations for appropriate discharge planning for this population, and a case study demonstrating the discharge planning process for a patient with chronic pancreatitis.

Gastrointestinal (GI) nurses know that caring for the patient with chronic pancreatitis can be a daunting task. Patients may have multiple issues that face them (and staff). Many deal with chronic pain and chronic psychosocial issues. Funding challenges such as obtaining high-dose pain medications, enzymes, tube feeding or total parenteral nutrition, equipment, and home health nursing exists. These challenges come at a time when Medicare and Medicaid have limited funding and implemented measures to decrease reimbursement to facilities for unplanned hospital readmissions. In addition, private insurance companies are following suit. Effective discharge planning helps decrease avoidable hospital days, prevents unplanned readmissions, and provides a process that helps patients understand their discharge. It also increases patient, family, and staff satisfaction and improves management of patients with complex conditions such as chronic pan-

creatitis. Gastrointestinal nurses should follow a systematic process to help ready these patients for discharge.

Background

A discussion of the relevance and impact of chronic pancreatitis is important. Chronic pancreatitis is a progressive, permanent destruction of the pancreas that results in endocrine and exocrine insufficiency (Nair, Lawler, & Miller, 2007). As chronic pancreatitis progresses, inflammation becomes worse and patients exhibit symptoms such as chronic disabling pain, nausea, vomiting, steatorrhea, diarrhea, and weight loss (DiMagno & DiMagno, 2009; Hussain & Karnath, 2005; Strayer & Schub, 2010). Patients often require hospital admission when they have an acute exacerbation of these symptoms.

Because of high-cost admission, pancreatitis is among the 10 leading causes of "years of potential life lost" among all digestive diseases (Everhart, 2008). Patient self-reported quality of life is substandard at best (Pezzilli, Morselli Labate, Fantini, Gullo, & Corinaldesi, 2007). Kozak, Owings, and Hall (2005) reported that 10.4% of digestive disease hospital admissions were for patients who had a primary diagnosis of chronic pancreatitis. In 2004, hospital facility cost alone associated with admissions of patients with chronic pancreatitis was almost \$2 billion (Everhart, 2008). Although the number of patients reflects a small portion of the general population, acute exacerbations of chronic pancreatitis often lead to costly hospital readmissions.

Received November 9, 2011; accepted April 26, 2012.

About the author: Shannon Bright Smith, DNP, RN, ACNS-BC, CGRN, is Faculty in Accelerated BSN and DNP Programs, Medical University of South Carolina, Charleston, South Carolina. She is also part-time faculty at University of Phoenix Online RN-BSN Program.

The author declares no conflict of interest.

Correspondence to: Shannon Bright Smith, DNP, RN, ACNS-BC, CGRN, 827 Hoss Rd., Charleston, SC 29414 (smithsb@musc.edu or birghtsmith@email.phoenix.edu).

DOI: 10.1097/SGA.0000000000000000

Discharge planning must occur to help prepare a patient with chronic pancreatitis for successful home management. The right steps identify patients at risk for hospital readmission or complications after discharge, link the patient with appropriate resources to prevent adverse outcomes, and follow up with assessment after discharge. A search of the evidence found the following themes that may critically affect how a patient's hospital discharge should be planned:

1. A guided interview proved successful in identifying patients at risk of experiencing an unsuccessful discharge (Pearson, Procter, Wilcockson, & Allgar, 2004). These patients and their caregivers were also exposed to education and retention of education assessment.
2. Assignment of high-risk patients to case management resulted in a 6% decrease in readmission rates (Kim & Soeken, 2005).
3. Anthony et al. (2005) found the following key issues when clarifying etiology of unplanned hospital readmissions: role delineation, patient education, team collaboration, case management, patient literacy, written discharge plan, post discharge plan, and quality control.
4. Proactive clinical pharmacy services in which patients received individualized education by a clinical pharmacist resulted in fewer readmissions at 3 months (36.2% vs. 45.5%) and at 6 months (50.7% vs. 56.3%) (Makowsky, Koshman, Midodzi, & Tsuyuki, 2009).
5. Patients should have an individualized discharge plan developed before leaving the hospital. Shepperd et al. (2010) found that this resulted in a reduction in hospital length of stay and significant reduction in readmissions.
6. Programs in which patients are enrolled in a chronic care management program (phone monitoring, social worker, registered nurse case manager, and advanced practice nurse) result in decreased readmissions (Discharge Planning Advisor, 2001).

A patient with a diagnosis of chronic pancreatitis admitted to the hospital should be assessed for high-risk factors such as support systems, financial resources, normal functional patterns, and educational needs. Who will care for this patient at discharge? Who do they have to talk to when they are going through a stressful time? Who will provide emotional support? A patient with chronic pancreatitis should have a friend or family member who can provide support during difficult times. In addition, these patients may benefit from therapies that range from biofeedback to psychotherapy as an adjunct to well-established clinical practices (Smith, 2010). Other pertinent information includes patient's health insurance coverage, method of obtaining discharge

medications, transportation home from the hospital, and the patient's planned disposition at discharge.

Interdisciplinary Team Members Contributing to the Discharge Plan

Nurse Case Managers

Once identified as being at high risk, patients should be referred to case management services for close management. Nurse case managers are expert nurses very familiar with appropriate allocation of resources. Nurse case managers can help patients ensure that patients' needs are met. They understand the disease process of chronic pancreatitis and what resources the patient will likely need at discharge. Nurse case managers provide assistance with clinically complex patients. They are skillful negotiators with funding sources and can provide justification to obtain medical insurance coverage for discharge needs such as high-cost medications, home health, or durable medical equipment. They maintain current knowledge of care coordination and through experience have built a database of valuable resources. Nurse case managers are also liaisons to the entire care management team that often consists of physicians, pharmacists, nurses, home health, durable medical equipment providers, and discharge planners.

Social Worker

The social worker is another core member of the case management team. Social workers perform psychosocial assessments to see what barriers exist to the patient's recovery from the acute exacerbation and long-term management of chronic pancreatitis. They may assist patients who cannot afford medications, have no health insurance, or need transportation home at discharge. Social workers are a valuable asset because resources are extremely limited. They seem to have limitless tricks of the trade and often work their magic in what is an otherwise-hopeless situation.

Pharmacist

Another team member who is critical to the success of patients with chronic pancreatitis is the clinical pharmacist. Patients with chronic pancreatitis have medication reconciliation completed on admission and at discharge. Clinical pharmacists provide education to ensure that patients have sufficient knowledge to manage chronic pancreatitis at discharge. For example, lack of adherence to the plan to take pancreatic enzymes with meals could result in ineffective alleviation of steatorrhea and increased pain. A clinical pharmacist should provide one-on-one education with the patient to ensure that the medication regimen is understood. Nurses at the bedside reinforce teaching and assess patient's retention of information.

Discharge Plan

Interventions by the case manager, social worker, clinical pharmacist, and other team members should be documented in an individualized discharge plan that is given to the patient at discharge. Although healthcare professionals are quite familiar with this process, patients may become bombarded with information and only retain a portion of education received. A written plan gives the patient an important reference tool after discharge.

Following up with the patient is the last step in the discharge planning process for patients with chronic pancreatitis, but it is one of the most important steps. A phone call helps evaluate whether the original plan set in motion during the hospital stay has unfolded as planned, whether the patient is sent home with home health services or to a facility. This provides an opportunity for quick correction of any part of the plan that did not happen.

Case Study

J. B. is a 53-year-old White man who experienced his first episode of pancreatitis 9 years ago after a week-end of binge drinking. He has undergone endoscopic retrograde cholangiopancreatography with sphincterotomy on several occasions during his chronic illness. He has been admitted for acute exacerbations of chronic pancreatitis four times in the last 6 months. His disease process is complicated by diabetes mellitus and he has been insulin dependent for 2 years.

J. B. reports that he has lost 10 pounds and has had large-volume, foul smelling, fatty stools since his last doctor's visit 1 month ago. His pain level at home is never less than a score of 6 on a visual analog scale of 0–10. He has hypertension but no other known health conditions. Admission orders included the following:

1. Nothing per os (NPO);
2. Vital signs every 4 hours;
3. Intravenous fluids of ringers lactate at 125 ml/hour;

4. Nasal gastric tube to low intermittent wall suction;
5. Insulin: Aspart (NovoLOG) subcutaneous every 4 hours;
6. Fasting blood sugar—units
 - >141–170 mg/dl—1 unit
 - 221–270 mg/dl—3 units
 - 271–320 mg/dl—4 units
 - 320 mg/dl—5 units
7. Notify physician for fasting blood sugar greater than 350 mg/dl;
8. Dilaudid (hydromorphone) 8 mg intravenous every 3 hours pro re nata (prn) pain; and
9. Laboratory and diagnostic studies: amylase, lipase, white blood cell count, erythrocyte sedimentation rate, stool for fecal fat, secretin stimulation test.

Nursing Assessment and Planning

The nurse assessing this patient ensures that a clinical pharmacist sees the patient to complete medication reconciliation and schedule teaching during the patient's hospital stay. The nurse queries J. B. to complete the hospital's patient admission assessment form and learns that he lives with his son and daughter-in-law who constantly feud about him being there after his divorce last year. The nurse also learns that his only source of income is disability income of \$1,400 per month. He has private insurance coverage through his former employer's COBRA plan (started 6 months ago) and costs \$600 monthly. He pays alimony payments of \$550 per month. His car was repossessed because he was unable to make the payments and keep car insurance.

J. B. tells the nurse that he cannot get his medication because he "can't afford copays" (see Table 1). In addition, he states that the last prescription for OxyContin (oxycodone) was denied by the insurance provider because of high dose and the large quantity ordered by his doctor. He expresses frustration and states that "those enzymes don't help anyway. I don't

TABLE 1. Monthly Medication Cost

Medication (1-Month Supply)	Total Cost	Insurance Coverage	Customer Cost
OxyContin 120 mg by mouth three times daily (180 pills, 60 mg)	1,774.36	1,744.36	30.00
Lantus (insulin glargine) 20 units subcutaneous daily (6 pens at the rate of 100 units)	354.65	279.65	75.00
Dilaudid 8 mg by mouth every 4 hours as needed for pain (180 pills)	425.67	100.20	325.47
Losartan/HCTZ 100/12.5 by mouth daily (30 capsules)	191.88	182.88	9.00
Pancreatic enzymes: pancrelipase supplied as Creon 10 Ec (249-mg capsules, one with meals and snacks (180 capsules)	205.39	130.39	75.00
Total monthly cost	\$2,951.95	\$2,437.48	\$514.47

Note: HCTZ = hydrochlorothiazide.

know why I bother.” J. B. admits to being so “stressed out” that he drinks one glass of wine with dinner and smokes one half pack of cigarettes per day to “take the edge off.” The nurse realizes that J. B. has a hard time financially and clinically and would benefit from a referral to the social worker and the nurse case manager.

To complete J. B.’s assessment, the nurse performs a 24-hour diet recall. J. B. reports the following meals. Yesterday’s breakfast was a smoked sausage, Western omelet with cheese, orange juice, and coffee. Lunch yesterday was a bacon club sandwich, French fries, and sweet tea. Dinner last night included fried chicken enchiladas, Spanish rice, and a milk shake.

The nurse recognizes that J. B. needs extensive teaching and completes a referral to the dietician.

After completing all referrals, the nurse explains each resource to J. B., answers any questions he has regarding the referrals, and documents accordingly in the medical record.

Discharge Planning Interventions

The nurse has uncovered four critical areas that must be addressed for J.B. to obtain success at discharge: (a) medication management, (b) dietary assessment and education, (c) detailed psychosocial assessment and interventions, and (d) complex care coordination and discharge planning. The clinical pharmacist completes the medication reconciliation documentation and meets with J. B. for education daily during his admission to ensure that he understands the importance of consistency in medication management as an outpatient. J. B. must understand specifics of pancreatic enzyme therapy, hypertension, diabetes management, and chronic pain management.

To manage J. B.’s dietary assessment and education needs, the dietician sees J. B. and does a total diet recall for the past 3 days. He helps J. B. understand categories of food and implications for pancreatic enzyme formation/pancreatic insufficiency. The dietician works with J. B. to complete a small, frequent meal plan of foods J. B. enjoys eating and that are bland and low fat and contain very little caffeine.

J. B. should also be able to express an understanding of the need to quit smoking and drinking alcohol. To help with this, the social worker meets with J. B. and refers him to outpatient psychotherapy, smoking cessation, and alcohol cessation community income-based programs. The social worker recommends a counseling program offered by the hospital where he (and his son and daughter-in-law) can receive services at no cost to them. Finally, the social worker provides education on community resources and pharmaceutical company resources to help J. B. afford his medication copayments.

The nurse case manager is the liaison for the interdisciplinary team and pulls together the plan offered by the clinical pharmacist, dietician, social worker, and medical team. She meets with the patient to ensure that he understands the findings of each expert and incorporates J. B.’s preferences into the plan. The nurse case manager discusses J. B.’s case with the interdisciplinary care team and writes a detailed plan of care that includes all services implemented (or still needed) and an expected date of discharge. She ensures that the registered nurse caring for J. B. understands to reinforce this plan in preparation for J. B.’s discharge day. The nurse case manager follows J. B.’s hospital course to keep the discharge plan on course or modify as needed.

Discharge Planning Evaluation

All members of the interdisciplinary team (registered nurse, physician, social worker, nurse case manager, clinical pharmacist, dietician, etc.) are responsible for reviewing the discharge plan throughout J. B.’s hospital stay. After discharge, the nurse case manager phones the patient to confirm that the plan has occurred as intended. Additional modifications are made to keep the patient on track and are documented in the patient’s medical record.

Summary

Quality discharge planning addresses physical and psychosocial concerns of the patient with chronic pancreatitis. These patients may often have problems that span beyond the scope of practice and time constraints of the bedside nurse. It is important that nurses recognize the importance of collaboration and use clinical staff expertise. The interdisciplinary team caring for patients with chronic pancreatitis should meet regularly to discuss, review, and update the plan of care. Each member plays an important role and the complexity of chronic pancreatitis requires all members working together to meet the patient’s needs. Interdisciplinary collaboration is the only effective way to facilitate positive patient outcomes after discharge for the patient living with chronic pancreatitis. ☼

REFERENCES

- Anthony, D., Chetty, V. K., Kartha, A., McKenna, K., DePaoli, M. R., & Jack, B. (2005). Reengineering the hospital discharge: An example of a multifaceted process evaluation. *Advances in Patient Safety*, 2, 379–394.
- DiMagno, M. J., & DiMagno, E. P. (2009). Chronic pancreatitis. *Current Opinion in Gastroenterology*, 25, 454–459.
- Discharge Planning Advisor. (2001). Initiative cuts ED visits, hospital admissions: Phone monitor role gives continuity to program. *Hospital Case Management*, 9(4), 59.
- Everhart, J. E. (2008). Pancreatitis. In Everhart, J. E. (Ed.), *The Burden of Digestive Diseases in the United States* (Ch. 23). Washington,

- DC: U.S. Government Printing Office; NIH Publication No. 09-6443 [119–123]. Retrieved May 13, 2013, from http://www2.niddk.nih.gov/NR/rdonlyres/0B814CEA-222A-4677-9B38-89D3BC34E1F4/0/BurdenDD_US_Bookmarks_Jan2009.pdf
- Hussain, N., & Karnath, B. (2005). Chronic pancreatitis. *Emergency Medicine*, 37(5), 11–17.
- Kim, Y. J., & Soeken, K. L. (2005). A meta-analysis of the effect of hospital-based case management on hospital length-of-stay and readmission. *Nursing Research*, 54(4), 255–264.
- Kozak, L. J., Owings, M. F., & Hall, M. J. (2005). National Hospital Discharge Survey: 2002 annual summary with detailed diagnosis and procedure data. In *Vital Health Statistics*. National Center for Health Statistics. Retrieved May 13, 2013, from <http://digestive.niddk.nih.gov/statistics/statistics.htm>
- Makowsky, M., Koshman, S., Midodzi, W., & Tsuyuki, R. (2009). Capturing outcomes of clinical activities performed by a rounding pharmacist practicing in a team environment: the COLLABORATE study [NCT00351676]. *Medical Care*, 47(6), 642–650.
- Nair, R. J., Lawler, L., & Miller, M. R. (2007). Chronic pancreatitis. *American Family Physician*, 76(11), 1679–1688.
- Pearson, P., Procter, S., Wilcockson, J., & Allgar, V. (2004). The process of hospital discharge for medical patients: A model. *Journal of Advanced Nursing*, 46(5), 496–505.
- Pezzilli, R., Morselli Labate, A. M., Fantini, L., Gullo, L., & Corinaldesi, R. (2007). Quality of life and clinical indicators for chronic pancreatitis patients in a 2-year follow-up study. *Pancreas*, 34(2), 191–196.
- Shepperd, S., McClaran, J., Phillips, C. O., Lannin, N. A., Clemson, L. M., McCluskey, A., ... Barras, S. L. (2010). Discharge planning from hospital to home. *Cochrane Database of Systematic Reviews*, (1), CD000313. doi:10.1002/14651858.CD000313.pub3.
- Smith, S. B. (2010). Exploration of the evidence to support clinical practice to decrease hospital readmission rates for patients with chronic pancreatitis. *Theses and Dissertations*. Paper 407. Retrieved <http://scholarcommons.sc.edu/etd/407/>
- Strayer, D., & Schub, T. (2010). *Pancreatitis, chronic*. Retrieved from <http://www.questushealth.com/wp-includes/handouts/Pancreatitis.pdf>

For more than 16 additional continuing education articles related to gastroenterology nursing, go to NursingCenter.com/CE.