

## In Brief

Focus on transition of care from outpatient to inpatient and back to an outpatient setting should be a priority in the fragmented health care system. Inpatient care coordinators, along with an interdisciplinary team from varying settings along the care continuum, can be instrumental in ensuring smooth, safe, and quality transitions. This, in turn, provides an avenue to ensure that patients are educated, adherent, and involved in their own health along the continuum of diabetes care.

# Inpatient Care Coordination for Patients With Diabetes

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Are your hospitalized patients with diabetes receiving diabetes self-management education? What education are they receiving from various hospital staff members, and when? Are patients' treatment regimens and medication histories being carefully passed along during transitions from one unit to another and ultimately to discharge? Is adequate and appropriate information being shared with patients, their family members, and their next care facility before discharge? Can your patients afford the prescriptions, supplies, and foods needed to follow their diabetes regimen as recommended after leaving the hospital? Who will follow up with patients to see if everything is going smoothly after they return home?

All of these questions are very real to anyone working with patients with new hyperglycemia or diabetes in an acute care setting. This article will discuss coordination of care as a possible solution to some of these issues.

### What Is Care Coordination?

Care coordination, sometimes called case management, is the process of helping health care consumers navigate safely and effectively through the fragmented and confusing health care environment that exists today in the United States. According to the Case Management Society of America, "Case management is a collaborative process of assessment, planning, facilitation, and advocacy for options and services to meet an individual's health needs through communication and

available resources to promote quality cost-effective outcomes."<sup>1</sup> Many care management models grew out of insurance-focused programs. These models included case managers as the pivotal point of patient advocacy. Often, these functions of utilization review, precertification, utilization management, care coordination, case management, discharge planning, and disease management were accomplished by different individuals in a variety of settings, such as hospitals, managed care organizations, and independent companies. These individuals performed their functions within the four walls of their specific settings, professing cost-effective, quality outcomes; however, they never spoke to each other, and so their efforts sometimes overlapped, sometimes hindered each other, and sometimes left gaps no one was catching.

Today, as the care management process evolves, the utilization and disease management components have given way to a more integrated approach to care coordination. Integrated care coordination professionals facilitate quality, cost-effectiveness, health promotion, and patient satisfaction with and involvement in care by coordinating medical and behavioral care services within more aggressive time frames and often in "single care" settings with one focus. These locations where care coordinators practice are often one stop on a continuum of settings and services to meet the needs of health care consumers.

Because of the “single care” setting, a new model with a framework for transition of care has surfaced. These new programs focus on the full continuum of care in terms of settings and scope of services, with the care coordinator driving patient care throughout. Advanced care management professionals strive for a patient-centered approach to community health care, partnering with appropriate providers and optimal care sites to produce quality health and financial outcomes. Transition of care is a multidisciplinary, multidimensional, complete health continuum consumer experience. Health care consumers and the system are empowered to move toward wellness as opposed to illness, cost containment, and access to quality care.

Transition of care is receiving much national consideration. In 2006, multiple organizations joined together to form the National Transition of Care Coalition. The coalition’s website ([www.ntocc.org](http://www.ntocc.org)) is full of information and solutions to transition of care issues.<sup>2</sup> In one study, it was established that “patients and their caregivers who received tools and support from a nurse ‘transition coach’ were significantly less likely to experience rehospitalization, a finding that was sustained for at least 6 months.”<sup>3</sup> “Transition coach” is another term for care coordinator and a great description of the role such professionals play. A patient-centered model of transition coaching provides the tools for patients to make the most informed and rational use of their health care resources by reducing uncoordinated care and multiple contacts while improving communication with providers.

Advanced care coordination is distinguished by:

- A health care consumer mentality empowering and educating patients and families to manage their personal health
- Enhanced communication and documentation throughout the health care system not only within individual care settings
- Interdisciplinary collaborative teams
- Coordinated care from health care providers’ offices to emergency departments to hospital units, to rehabilitation facilities, to home care and back to outpatient care if needed

In short, care coordination improves services, reduces costs by reducing duplication, and allows for sharing of resources among all of a given patient’s care providers.

### The Acute Care Setting

The Joint Commission has taken an active role regarding hyperglycemic control and safety within hospitals that seek accreditation or certification. The Joint Commission joined with the American Diabetes Association (ADA) to develop goals and standards for hospitals seeking certification. The goals and standards, if met, can help improve the outcomes of hyperglycemic patients and provide an opportunity for patients to receive excellent hospital care. The Joint Commission and ADA recommend that inpatient diabetes programs include the following crucial attributes.<sup>3</sup>

- Specific staff education requirements
- Written blood glucose monitoring protocols
- Plans for the treatment of hypoglycemia and hyperglycemia
- Data collection on incidences of hypoglycemia
- Patient diabetes self-management education
- An identified program “champion” or program champion team

The care of inpatients with hyperglycemia is complex. As noted above, the Joint Commission has indicated that it is crucial to identify a program champion or champion team. In most cases, these champions are care coordinators, who ensure that patients receive organized, coordinated care both in the hospital and throughout their transition from one setting to another. Care coordinators are a great resource for continuity of care and the development of a collaborative team approach to ensure a high-quality, safe, and cost-effective hospitalization. Hospitalization should be viewed as an investment more than as a cost<sup>4</sup> because it could help prevent additional morbidities and hospitalizations resulting from complications and lack of adequate patient self-care, both of which can greatly increase the costs of diabetes care. Therefore, hospitalization is an opportunity for assessment and education to improve diabetes care over the long run. Care coordinators and case managers are resources who can ensure that the treatment team

is fully engaged in the care of these patients. Following are some of the key goals to be included in an inpatient care coordination plan.

### Identify hyperglycemic and diabetic patients.

The identification of an individual with hyperglycemia may already be accomplished in any unit of a hospital, including the emergency department. The care coordination team must be mindful of any patient’s history of diabetes and of elevated blood glucose levels in any hospitalized patients, including those without a diagnosis of diabetes. Undiagnosed hyperglycemia is common and can occur at any time during hospitalization as a result of illness or treatment. Inpatient hyperglycemia does not necessarily indicate that a patient has diabetes. However, the care coordination team must be prepared for next steps<sup>5</sup> and should collaborate closely with the hospital’s diabetes educator or nurse to identify patients with hyperglycemia and ensure best practices.

### Create a collaborative team.

This interdisciplinary team should be composed of physicians, nurses, diabetes educators, dietitians, case or care managers, discharge planners, and pharmacists. This team should be involved in diabetes management throughout the inpatient continuum from the emergency department to critical care to general and pre- and postoperative care, and eventually to discharge and beyond.

### Fully assess patients.

The patient assessment must include lifestyle, access to health care services, available support, culture, health literacy, knowledge of diabetes and treatment recommendations, and financial stability, which includes the ability to pay for blood glucose monitoring supplies, medications, and healthful foods.

### Develop an individualized plan.

Patient care plans should include interventions by the entire collaborative team for the duration of the hospitalization. Continued management is a priority, with consistent planning by the full team. Include the patient and his or her family members or caregivers as members of the team, and adopt a patient-centered approach. Planning for and implementing protocols to

control blood glucose is crucial, especially in intensive care units.

### **Educate.**

Facilitate education by the collaborative team for patients, families, and hospital staff in areas of care for patients with hyperglycemia or diabetes. Create or obtain patient education materials that will deliver consistent messages from all staff. When distributing these education materials, be cognizant of the individual learner's health literacy. In general, patient education materials should not exceed a fourth- or fifth-grade reading level. Assess patients thoroughly and then tailor education appropriately to match their learning style.<sup>6</sup>

### **Encourage a safe environment.**

In 2005, the Joint Commission developed its Sentinel Events, which included National Patient Safety Goals. The eighth goal identified is medication reconciliation. The Joint Commission defines medication reconciliation as "accurately and completely reconciling medications across the continuum of care."<sup>7</sup> In its National Patient Safety Goals, the Commission identifies steps such as placing the medication list in highly visible locations in each patient's chart, creating an interdisciplinary process of reconciling medications on admission and at any time of transfer or discharge, and communicating a list of medications to the next providers of care and the patient during transitions.

It is crucially important to include all of the medications the patient was taking before hospitalization, new medications started during hospitalization, and those ordered for use after discharge. One of the most complex hurdles for patients is determining which medications they should take once they are back at home. This confusion has the potential to create an unsafe environment if patients continue medications prescribed before hospitalization but which may no longer be necessary after hospitalization. Attention to such medication issues should be given regardless of the care setting a patient will be in after discharge.

### **Promote self-care.**

Assist the team in promoting patient self-care across settings in a continuum adherence program. As mentioned above, this effort must include assess-

ment of patients' health literacy, medication knowledge, motivation to change, and social support system and reconciliation of medications used in the hospital with those used before and after hospitalization. Comorbidities, polypharmacy issues, and the stress of hospitalization or illness may create insurmountable barriers to self-care for many patients. Be prepared with information regarding medication changes, self-monitoring, and titrating medication doses according to blood glucose levels, meal content, and activity levels. Communicate this information to patients, family members, and other caregivers, as well as to the outpatient care coordination team.

### **Empower patients.**

Encourage patients to be involved in their own care from hospital back to home and ongoing thereafter. Create an open environment in which they can ask questions. Listen for potential barriers and assist patients in removing any possible roadblocks to effective self-care.

### **Coordinate care.**

Care must be coordinated by the collaborative team, facilitated by the care coordination staff, throughout the full hospital stay, from one transition to the next, including discharge. A discharge plan promoted on Day 1 of hospitalization, if not before, can help smooth and promote a safe and successful discharge. Securing insurance coverage for the hospital stay, as well as for necessary outpatient supplies, equipment, and medications, may require additional coordination, especially if alternative funding is needed.

### **Focus on continuity during transitions between inpatient and outpatient care.**

An inpatient diabetes management task force of the American College of Endocrinology and the ADA recently developed a consensus statement on inpatient diabetes and glycemic control in which the importance of continuity of care between inpatient and outpatient settings was stressed.<sup>4</sup> A consistent plan for glycemic management, both in the hospital and after discharge, will foster patients' involvement in their own care.

As patients enter the hospital, having medical records available from

their primary care setting can be enormously helpful for hospitalists or specialists who provide their inpatient care. Likewise, patient education and self-care efforts in the hospital can benefit outpatient care efforts later on. Discussion from the time of admission about the meaning and value of the A1C test will help patients understand this measure of their diabetes control, which will further enhance self-care in the long term. Patient motivation and readiness to accept the challenges of either a new diagnosis of diabetes or self-care for a long-standing diagnosis must be assessed and, if necessary, enhanced because lifestyle modification may be required for successful self-care. Often, patients' medication and lifestyle adherence starts with attention to these issues during hospitalization.

Tools focusing on medication adherence are available through the Case Management Society of America. Case Management Adherence Guidelines<sup>8</sup> have been developed for people with diabetes and can be found online at [http://www.cmsa.org/portals/0/pdf/CMAG\\_Diabetes.pdf](http://www.cmsa.org/portals/0/pdf/CMAG_Diabetes.pdf).

Hospitalists are actively pursuing protocols and routines that will enhance the successful transition of diabetes care along the inpatient continuum and throughout the transition from inpatient to outpatient settings, using an interdisciplinary team approach. The Society of Hospital Management's Glycemic Control Task Force has produced a comprehensive workbook that is an excellent resource for developing transition-of-care plans from acute care to discharge to the community.<sup>9</sup> This resource can be found online at [http://www.hospitalmedicine.org/AM/Template.cfm?Section=Search\\_Advanced\\_Search&section=Glycemic\\_Control&template=/CM/ContentDisplay.cfm&ContentFileID=2934](http://www.hospitalmedicine.org/AM/Template.cfm?Section=Search_Advanced_Search&section=Glycemic_Control&template=/CM/ContentDisplay.cfm&ContentFileID=2934).

Care coordination involving an interdisciplinary team in the hospital setting is crucial to successfully meeting patients' needs. Hospitalization, often a stressful time for patients, is only the beginning of the care-coordination process; ensuring smooth and cohesive transition of care should be a priority. Communication between caregivers before, during, and after hospitalization must include medications prescribed, medical records, education offered, assessment findings (especially health literacy), and patient

and family willingness to change lifestyle factors. Having patients' input into the care-coordination process is a key to success, which can be measured by a smooth transition throughout every stage of hospitalization and into outpatient care settings.

## References

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