Brief Quality Improvement Report

A Quality Improvement Initiative for Improving Appropriateness of Referrals From a Cancer Center to Subacute Rehabilitation

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Abstract

Background. Subacute rehabilitation may not be appropriate for many patients with advanced cancer. We evaluated outcomes of cancer center inpatients transferred to subacute rehabilitation, implemented a multidisciplinary intervention to improve appropriateness of referrals, and evaluated its potential impact.

Measures. Percentage of patients who returned for further anticancer treatment after subacute rehabilitation (preintervention) and percentage of patients who were referred and transferred to subacute rehabilitation (pre and post).

Intervention. Stakeholder engagement; feedback about outcomes to faculty and staff; increased communication between therapy, social work, nursing, and physicians about therapy referrals; and goals of care at daily prerounds meeting.

Outcomes. Potential reduction in subacute rehabilitation referrals and transfers. Intensive intervention was difficult to maintain, but team is continuing efforts at improved communication.

Conclusions/Lessons Learned. Intervention may have improved outcomes short-term but was complicated and difficult to maintain. Addressing appropriateness of subacute rehabilitation referrals can occur within a multidisciplinary approach to improving communication about goals of care for patients with advanced disease. J Pain Symptom Manage 2014;48:127–131.

Key Words
Palliative care, subacute rehabilitation, physical therapy, quality improvement, goals of care

Background

Rehabilitation services are a critical element of supportive care for many cancer patients, in helping to both improve functional ability after injury, illness, or procedures and regain independence for activities of daily living when

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functional status can be restored. Rehabilitation services and exercise also can help to improve a variety of symptoms in advanced cancer, such as pulmonary function, pain, and possibly fatigue.[1] However, for patients approaching the end of life, functional decline may be a sign of the dying process. This decline is frequently caused or exacerbated by acute illness, procedures and complications, or side effects of cancer treatments, which can lead to difficulty in determining whether the decline is reversible. In addition, significantly decreased function is a barrier to starting new cancer treatments and may make staying at home independently no longer possible. When prognosis is limited and function unlikely to improve, goals of rehabilitation services generally shift to focus on maximizing home safety and helping patients and caregivers with activities of daily living, mobility, and functional activities.[2]

Hospitalized advanced cancer patients with functional decline and no clear treatable cause are frequently referred to rehabilitation services, and understanding prognosis and goals of care as part of the referral is critical for expectations, determining therapeutic goals, and discharge planning. Acute rehabilitation is usually not indicated for these patients as they may be medically complex or unable to participate in this intensive therapy. Subacute rehabilitation is frequently used as an alternative (one-third of the elderly use subacute rehabilitation in the last six months of life, and one in 11 die while enrolled).[3] However, subacute rehabilitation, provided in nursing homes and not focusing on symptom management and palliative care, often does not match well with advanced cancer patients' needs. Patients may be relatively young and could benefit from services (e.g., transfusions, radiation, or hospice) not provided in this setting.

For patients with advanced disease, understanding prognosis and goals of care helps frame expectations, goals, and discharge planning. If patients need significant caregiving, meeting with the family may be helpful to discuss other potentially preferable options, such as family or paid caregiving arrangements with home hospice help, or other inpatient options such as residential hospice. Alternatively, subacute rehabilitation can benefit patients with advanced cancer who lack good caregiving options or need certain services, such as intravenous antibiotics. Selected patients who cannot participate in acute rehabilitation also may benefit from subacute rehabilitation to maximize functional ability. Patients and caregivers might sometimes prefer subacute rehabilitation for the longer stay offered than in acute rehabilitation for medical support and caregiving or because the facility is closer to home than acute rehabilitation.

The Harry J. Duffey Family Patient and Family Services Program at The Johns Hopkins Sidney Kimmel Comprehensive Cancer Center (JHSKCCC) noticed increased numbers of referrals to subacute rehabilitation in 2010, many for patients with limited prognosis or significant treatment needs. Also, many patients had poor outcomes, dissatisfaction, and readmissions after transfer. We found no evidence on cancer and subacute rehabilitation in a literature search or in a recent systematic review on quality improvement interventions in palliative care.[4] Therefore, as part of a larger end-of-life care quality improvement initiative in our cancer center, the palliative care program initiated a project on subacute rehabilitation, with two phases: 1) to evaluate outcomes for patients discharged to subacute rehabilitation from our center and 2) to design and evaluate an intervention to improve the appropriateness of referrals, with input from key stakeholders.

Measures

In the first phase, for initial measurement to evaluate issues with subacute rehabilitation as the basis for designing an intervention, we evaluated selected outcomes of patients transferred to subacute rehabilitation from our cancer center, using data from 2010. We reviewed medical records to determine the percentage of patients who ever returned to JHSKCCC for further chemotherapy.

In the second phase, to evaluate the potential impact of the intervention, during the year 2012, when the intervention was developed and implemented, we measured pre- and postintervention monthly rates of inpatients formally referred to Patient and Family Services for subacute rehabilitation and rates of patients referred but never transferred. During a two-month period at the start of the intervention, we also observed multidisciplinary goals of