

# Effects of a Nurse-Initiated Telephone Care Path for Pain Management in Patients With Head and Neck Cancer Receiving Radiation Therapy

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This quality improvement project aimed to determine whether a nurse-initiated telephone care path could decrease emergency department visits, hospital admissions, and pain levels for patients with head and neck cancer receiving radiation therapy. The care path consisted of a six-question questionnaire administered to patients during telephone calls made 48–72 hours after prescription of pain medication by a radiation oncologist.

## AT A GLANCE

- A nurse-initiated telephone care path after radiation therapy and pain medication prescription for patients with head and neck cancer can decrease hospital admissions and emergency department visits prompted by unmanaged pain.
- To assess the patient's pain and determine whether the prescribed pain medication is effective, a nurse should call the patient 48–72 hours after radiation therapy and prescription of pain medication.
- An effective nurse-initiated telephone care path can be guided by a six-item questionnaire.

## KEYWORDS

head and neck cancer; radiation; pain; emergency department; hospital admission

## DIGITAL OBJECT IDENTIFIER

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In the United States, about 4% of all cancers are diagnosed as head and neck cancer (HNC) (Cancer.net, 2022). In 2021, 66,630 individuals, consisting of 48,740 men and 17,890 women, developed HNC (Cancer.net, 2022). In 2015 in North Carolina, there were 1,530 cases and 276 deaths from HNC, with a 12.8 per 100,000 incidence rate (North Carolina State Center for Health Statistics, 2019).

Radiation therapy for patients with HNC can profoundly affect activities of daily living, including speaking, swallowing, and breathing (Bossi et al., 2019). Pain has been reported as the chief complaint and most debilitating side effect of treatment for patients with HNC (Schaller et al., 2021). Mirabile et al. (2016) conducted a review of 39 studies that documented pain surrounding cancer treatment; 50% of patients with HNC reported pain before treatment, 81% reported pain during treatment, and 70% reported pain after treatment. Patients who present with pain typically encounter a complex course of treatment. Pain can be strenuous to manage, and patients with HNC frequently need additional interactions and communication with healthcare professionals to sufficiently control their pain (Qiao et al., 2019).

Patients with HNC may experience unresolved and unmanaged pain leading to poor outcomes, such as dehydration, weight loss, need for percutaneous endoscopic gastroscopy tube insertion, missed radiation therapy sessions, emergency department (ED) visits, admissions to the hospital, and death (De Sanctis et al., 2016). An interprofessional approach to pain management for patients with HNC receiving radiation therapy should occur throughout treatment (Bossi et al., 2019). Interventions should occur as “inpatient, outpatient, home care, and telephone advice” (Bossi et al., 2019, p. 51). Davis et al. (2019) stated the following: “Nurse-led services have emerged over the past 20 years as evidence-based structured models of care delivery, providing a range of positive and coordinated healthcare outcomes” (p. 1). The purpose of this quality improvement project was to evaluate a nurse-initiated telephone care path for patients with HNC to reduce pain, hospital admissions, and ED visits.