

## Abstract

*Background and Purpose:* Hypersensitivity reactions are a known risk for oncology patients receiving intravenous therapy. Proper assessment and management are key responsibilities of health care providers caring for oncology patients; however, there are significant knowledge gaps and practice variations amongst providers and health organizations. There remain no standard published guidelines for hypersensitivity management to guide clinical decision making.

*Objectives:* The purpose of this project was to evaluate application of a comprehensive symptom-based order set and practice guideline in improving hypersensitivity management for adult oncology patients in an ambulatory infusion setting.

*Methods:* This quality improvement project used a pre- and post- test design in evaluating staff knowledge on hypersensitivity management (N=34), retrospective chart reviews to analyze hypersensitivity occurrence and reversal medication administration (N=84), and a post-survey to measure staff satisfaction (N=17).

*Findings:* Pre and post education scores showed statistically significant improvement in provider hypersensitivity knowledge from 65.6% pre-education to 88.24% post education ( $p < 0.004$ ). After the educational intervention, time to reversal medication administration statistically and clinically improved for Famotidine ( $p < 0.038$ ) and Corticosteroid ( $p < 0.039$ ) administration as well as time to symptom resolution ( $p < 0.023$ ). Staff expressed increased ability and confidence in hypersensitivity care upon project completion.

**Keywords:** hypersensitivity, oncology, outpatient, protocol, reaction