

Improving Oral Medication Adherence in Oncology Outpatients at a Rural Cancer Center

Abstract

Background and Purpose: Oncology patients are choosing oral anticancer medications over traditional intravenous anticancer options, but adherence rates remain low. Forgetfulness is a common reason for nonadherence which leads to adverse outcomes such as treatment failure and death. The goal of this quality improvement project was to standardize the way adherence was assessed, and to measure adherence before and after a pill box regime was added to determine if an enhanced education program with a pill box system resulted in improved adherence.

Methods: New adult patients receiving oral anticancer medications at a rural outpatient cancer center were educated on how to properly use a pillbox during a structured educational program and told to use the pillbox with each cycle. Objective adherence surveys were administered to all new and existing oncology patients who received oral anticancer medications during the implementation period. Percentage comparisons were utilized to assess effectiveness of the intervention in new oncology patients as compared to existing patients.

Results: There were 45 patients in the pre-intervention group with a majority over age 64, female, and white. The post-intervention group had 5 patients with a majority over age 64, female, and black. Most patients only had one medication in their regimen. Both groups had a combined survey completion rate of 74%. The percentage of patients who were “always adherent” increased from the pre- to post-intervention group, and the percentage of “never adherent” decreased.

Conclusions: The multi-modal educational approach showed improved outcomes in oral anticancer medication adherence, which could have profound impacts on treatment success and should be further developed.

Implications: Standardizing medication adherence follows national guideline recommendations and allows for easier quality and safety monitoring. Combining reminder packaging with a calendar and education may improve medication adherence therefore improving treatment success.

Keywords: oral anticancer medication; medication adherence; standardized assessment; adherence survey; oral chemotherapy adherence