



# The Effects of a Psychotropic Protocol on Reducing Unnecessary Psychiatric Medication in the Long-Term Care Setting

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## INTRODUCTION

### BACKGROUND AND SIGNIFICANCE

- Antipsychotic medications are commonly utilized as first line pharmacological treatment approach to behavioral and psychological symptoms of dementia (BPSD) and can pose adverse effects (Ballard et al., 2008).
- Antipsychotic medications are associated with increased cognitive decline and increased risk for adverse cerebrovascular events, metabolic syndrome, delirium, and death (Chenoweth et al., 2018).

### PURPOSE STATEMENT

- The purpose of this project was to facilitate the implementation of a systematic antipsychotic review process to help reduce the rate of unnecessary antipsychotic use in the facility.

### PICOT

- In long term care residents prescribed an antipsychotic medication (P), how does educating staff on identification of behavioral and psychological symptoms of dementia and nonpharmacological interventions as well as the use of a systematic medication review approach (I) compared to the current protocol (C) affect the rate of antipsychotic use (O) within a three-month period (T).

### OBJECTIVES

- There will be a 1% reduction in antipsychotic medications by 11/5/21.
- 50% of all nursing staff including nurses and CNAs will be educated about BPSD, the risk of antipsychotic use and benefits of non-pharmacological interventions as well as the new process that will be put in place for residents included in the study.
- 50% of the quality improvement team and providers will be educated on the CMS regulations regarding antipsychotic medications and the systematic medication review process.

## MATERIALS AND METHODS

**Design:** Longitudinal, pre-test, post-test quality improvement project.

### Intervention:

- Informational letters were sent out at the beginning of the intervention to all physicians that have privileges at the facility to make the physicians aware of the project and objectives.
- The project included a pre-test for staff prior to education intervention then a post-test after education was completed. A paired t-test was conducted for results.
- Baseline and follow-up chart reviews were conducted prior to initiating the intervention to gather data on the rate of antipsychotic medication usage within the long-term care division. Official percentage of antipsychotic as reported by the Center for Medicare and Medicaid Services (CMS) was also obtained.
- The quality improvement study focused on rate of antipsychotic use rather than statistical significance, Antipsychotic rate reduction reflects clinical significance for the nursing facility.
- A quality improvement team met weekly for the purpose of systematic review of antipsychotic medications was formed with assistance of Director of Nursing as well as the facility educator.
- The quality improvement team met every Wednesday to conduct a systematic review of antipsychotic medications.

**Setting:** A family owned and operated 56 bed rural nursing facility.

**Project Population:** Purposive convenience sample of residents living at the facility within the skilled nursing area.

## RESULTS

### Objective 1:

- Baseline chart review using "Point Click Care" electronic records from facility indicated a rate of 18% of long-term patients were prescribed and taking an antipsychotic medication.
- According to the Center for Medicare and Medicaid (CMS) on 7/5/21, prior to initiating the intervention the percentage of long-term residents receiving an antipsychotic medication was 10.0%.
- Post intervention chart review per "Point Click Care" showed a rate of 14% of patients receiving an antipsychotic.
- Post intervention review per CMS on 11/5/21 the percentage of long-term residents receiving an antipsychotic was 8.5%.



### Objective 2:

- The total number of nursing staff including nurses, CNA's as well as the leadership team was 26
- 65% (n = 17) of nursing staff completed the education sessions and pre-test, post-test.
- The education was successful in improving knowledge of staff regarding antipsychotic administration as shown below with the results of a paired t-test showing results statistically significant at the .001 level.
- The mean correct answers from the pre-test was 2.24 (sd = .831) and after the education session was completed the mean score increased to 8.35 (sd = .862).
- The difference between the two means is statistically significant (t = -21.627, p < .001)

Paired Samples Statistics

Pair	Mean	N	Std. Deviation	Std. Error Mean
1 before intervention	2.24	17	.831	.202
1 after intervention	8.35	17	.862	.209

Paired Samples Test

Pair	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
1 before intervention - after intervention	-6.118	1.166	.283	-6.717	-5.518	-21.627	16	<.001

## RESULTS

### Objective 3:

- Of the eight staff comprising the quality improvement team, 50% (n=4) were able to complete the education sessions
- The team is comprised of nursing leadership, activities staff, physical therapy The therapist, activities and social worker did not attend education.

## CONCLUSIONS

### Objective 1: GOAL MET

- Antipsychotic administration rates decreased by 1.5%

### Objective 2: GOAL MET

- 65% of nursing staff completed the education sessions as well as the pre-test post-test
- The education sessions were successful as shown by the paired t-test showing statistical significance at the .001 level.

### Objective 3: GOAL MET

- 50% of the quality improvement team successfully completed the education.

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