# AIMS Screening: A Procedure Evaluation

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## Purpose

- To evaluate adherence to an organization's procedure for Tardive Dyskinesia (TD)
- Data from the electronic medical record (EMR) was analyzed to determine the number of times clinicians completed the electronic Abnormal Involuntary Movement Scale (AIMS)

## Background and Significance

**Tardive Dyskinesia:**

- Newer antipsychotic medications from the 80s up to recent years significantly decreased tardive dyskinesia.
- TD affects an estimated 500,000 people in the U.S., 60-70 % of all cases are mild
- Approximately 30 % are moderate to extreme and of these more than 40 % have extreme anxiety related to their symptoms.
- Approximately 3 % of cases are severe
- Screening using AIMS can reduce these statistic.1
- VMAT2 drugs treat TD

**Antipsychotic Medication Benefit:**

- Provide a better quality of a life for patient with severe mental illnesses
- Provide relief of symptoms of anxiety, depression, irritability, sleep difficulty

**Antipsychotic Medication Risk:**

- Cause metabolic diseases such as diabetes and heart disease
- Cause long term movement disorders

**AIMS**

- A screening instrument designed to detect TD with a Cronbach alpha score of r-0.97
- Evidence-based practice recommends annual AIMS screening for all patients taking antipsychotics

## Methods

- Inclusion criteria all patient/provider encounters for clients who were taking antipsychotic medications between August 19, 2020 and November 26, 2020
- De-identified data included at least one of the top five most frequently prescribed antipsychotic medications;
- Data included provider type, practice settings, encounter date, and whether an EMR AIMS assessment was completed.

## AIMS Instrument



## Results-AIMS

**Table 1: Patient Encounters and AIMS**

| | | Patient encounters (n) | Percentage (%) |
|---|---|---|---|
| Total visits without AIMS completed | | 2059 | 95 |
| Number of AIMS completed | | 108 | 5 |
| Total | | 2167 | 100 |

The data did not reflect any of the AIMS assessment forms that were manually completed.

## Other Results

**AIMS and Medications**

| Medication | AIMS completed | AIMS not completed | Total |
|---|---|---|---|
| aripiprazole | 27 | 591 | 618 |
| olanzapine | 23 | 402 | 425 |
| risperidone | 31 | 433 | 464 |
| quetiapine | 26 | 384 | 410 |
| clozapine | 1 | 249 | 250 |
| Total | 108 | 2059 | 2167 |

2167 patients treated with antipsychotic agents in an outpatient behavioral health clinic.

**Provider Type Completing AIMS**

| Provider Type | AIMS Yes | AIMS No | Visits | Percent | Percent per visits |
|---|---|---|---|---|---|
| MD | 16 | 765 | 781 | 14.8 | 1.6 |
| DNP | 50 | 364 | 414 | 46.3 | 8.9 |
| PA | 42 | 924 | 966 | 38.9 | 3,3 |
| unknown | 0 | 6 | 6 | 0 | 0 |
| Total | 108 | 2059 | 2169 | 100 | |

Five of the most used antipsychotic medications were selected from a list of 21 medications.

## Conclusion

5% of 2167 encounters resulted in AIMS

Provider-types:

- MD=Psychiatrists
- PMHNP = psychiatric and mental health nurse practitioner
- PA=Physician's assistants

( 4 MDs, 1 PMHNP, and 6 PAs)

Of the 2169 encounters

- 781were with MDs
- 966 with a PA
- 414 with the NP (19 %), 12.1 % resulted in an AIMS screening 46.3 % of the total no. of AIMS

## Discussion

**Recommendations**:

- Continuous evaluation of adherence to clinical practice recommendations
- Give incentives for increased use of the electronic AIMS form
- Generate quarterly reports from the electronic health record to show percentage AIMS completed electronically

**Sustainability and recommendations**:

- Develop a system to alert the clinician to complete monitoring assessments
- Remove paper AIMS forms from clinical setting
- Provide AIMS education module
- Extend AIMS completion to counselors

**Future Needs**:

- Conclusive studies showing benefit of screening
- Improved scoring and
- Consistent and ongoing training for all staff to create a more collaborative approach to medication management

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## References

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