

## Introduction

Second generation antipsychotic medications (SGAs) are commonly prescribed for patients with symptoms of a psychiatric diagnosis. SGAs carry both short-term and long-term side effects of metabolic side effects. This project was conducted at an integrated primary care and behavioral health clinic that works under the collaborative care model for patient care.

## Problem

The current problem to be addressed by this project is the actual or perceived provider barriers to adherence to the EBP guidelines for monitoring of metabolic side effects for SGA medications. This quality improvement project will assess provider perceived barriers to adherence of these clinical practice guidelines through a needs assessment among providers and then implement an educational intervention based upon those needs identified.

## Aim

The purpose of this project was to assess providers perceived barriers to monitoring of SGAs and conduct an educational intervention to provide education on the clinical practice

guidelines for monitoring of SGAs.

## Objectives

1. Determined baseline rate of adherence for patients participating in team-based care through a record review in patients that receive integrative primary care and psychiatry services by a retrospective chart review for patients seen for psychiatric services.
2. A needs assessment was conducted to understand the barriers for non-adherence via REDCap survey with providers within the clinic
3. Analyzed data from provider barrier survey to identify learning objectives and discussed provider's perception of barriers to adherence
4. Based on the needs assessment, an educational intervention was created using best-practice guidance and based on the specific barriers identified in the needs assessment to provide education about the guideline for metabolic monitoring of SGAs
5. Conducted a post-educational provider survey to assess providers knowledge and assess whether objectives were met following the educational intervention

### NCQA Metabolic Monitoring Parameters of SGAs

Parameter	Baseline	1 Month	2 Months	3 Months	6 Months	Annually
Personal History & Family History	X					X
Height	X	X	X	X	X	X
Weight	X	X	X	X	X	X
Body Mass Index (BMI)	X	X	X	X	X	X
Waist Circumference	X	X	X	X	X	X
Blood Pressure & Heart Rate	X			X		X
Fasting Blood Glucose	X			X		X
Hemoglobin A1C	X			X	X	X
Lipid Panel	X			X	X	X

## Methods

### Plan

•Project Design: The project is a quality improvement project developed to improve knowledge of clinical practice guidelines for metabolic monitoring of SGAs and assess provider's perceptions of barriers to adherence to these guidelines.

•Setting: Mercury Courts Clinic is an integrated primary care and behavioral health outpatient clinic in Nashville, TN. The clinic provides care to patients with limited or no insurance who are seeking services for both primary care and behavioral health services

### Do

•REDCap was used to develop and administer the pre and post surveys to medical providers who have prescribing privileges within the practice pre and post educational intervention. Utilizing the pre-survey data an educational intervention was held to provide training on evidence-based practice for metabolic monitoring. A post-educational intervention survey was administered to providers to assess knowledge and whether educational intervention objectives were met.

### Study

•Data was collected analyzed utilizing Excel. Providers were surveyed about barriers to metabolic monitoring of SGA medication. Clinical patient data in those patients prescribed SGAs within the clinic was collected from the EMR to establish current baseline adherence to clinical practice guideline.

### Act

•Options for the project are to adopt the current clinical practice guidelines, adapt the clinical practice guidelines to meet the format of the clinic, or abandon by continuing to practice according to clinician-based decision-making skills.

## Results

•**100%** of providers surveyed were unaware of the current clinical practice guidelines for metabolic Monitoring of SGAs.

•**71%** of providers surveyed believe SGAs should be monitored.

•**86%** of providers surveyed feel laboratory work is beneficial in treatment planning.

•**57%** of providers surveyed report patient's being seen telehealth only is currently the most significant barrier to monitoring of SGAs

### Baseline Clinic Rates of Adherence to NCQA Metabolic Monitoring Parameters of SGAs

Parameter	Baseline	1 month	2 months	3 months	6 months	Annually
Personal History & Family History	55%					n/a
Height	73%	27%	45%	50%	83%	n/a
Weight	82%	36%	55%	50%	100%	n/a
Body Mass Index (BMI)	73%	27%	45%	50%	83%	n/a
Waist Circumference	0%	0%	0%	0%	0%	n/a
Blood Pressure	82%			50%		n/a
Heart Rate	82%			50%		n/a
Fasting Blood Glucose	64%			13%		n/a
Hemoglobin A1C	55%			0%	33%	n/a
Lipid Panel	64%			13%	33%	n/a

### Provider Perception: Barriers to Monitoring of SGAs

	Always	Usually	Sometimes	Rarely	Never
Lab work is Unable to be Drawn	0%	0%	0%	29%	71%
Patient is Telehealth Only	0%	0%	57%	25%	0%
Patient Refuses Lab work	0%	0%	14%	71%	14%
Lab work is to be completed by another outside provider	0%	0%	33%	67%	0%
Patient is unable to afford, or insurance will not cover costs of monitoring	0%	0%	14%	43%	43%

### Question: What Factors Do You Consider When Choosing and SGA? (select all that apply)

Cost	83%	Cost	0%
Insurance Coverage	83%	Insurance Coverage	0%
Elevated Lipid	83%	Elevated Lipid	0%
Elevated Glucose	83%	Elevated Glucose	17%
On Label Use	67%	On Label Use	50%
Weight Profile	83%	Weight Profile	33%
Samples Available	17%	Samples Available	0%

### Question: Which Single Factor Influences Choice the Most? (select one)

## Implications for Practice

- Despite having evidence-based practice guidelines when patients are treated on SGAs poor adherence to the recommendations continue (Mitchell et al., 2012).
- Cardiovascular disease and metabolic syndrome have a negative financial impact on the healthcare system by leading to increased cost (ADA, 2018).
- Improved rates of metabolic monitoring according to the established NCQA guidelines in patients prescribed SGA medications aid in mitigating or reducing long-term side effects of SGAs.

## Future Research

- Expand patient sampling to include all patients prescribed SGAs within the clinic
- Collect clinical patient data at 3 months and 6 months following educational intervention to assess for improvement in metabolic monitoring.

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