Introduction

- Pharmacogenetic testing (PGT) has the potential to improve treatment response in the pharmacological management of major depressive disorder (MDD).
- 16 to 20% of the population meets criteria for MDD; symptom remission is achieved only 40% of the time.¹
- When remission is not achieved, patients have a greater risk of symptom relapse and developing non-remitting, chronic MDD.²
- Patients with MDD treated using PGT had a 2.52 greater chance of achieving remission.³
- Barriers to PGT implementation include: provider education, rapidly changing evidence base, PGT data privacy concerns, and lack of guidelines regarding its use.⁴

Purpose

- Purpose: To improve the systematic use of PGT
- Objective 1: Provide education to prescribers
- Objective 2: Create guidelines for PGT use
- Objective 3: Integrate PGT data into the EHR

Methods

- Project was not deemed human subjects research.
- Setting: Behavioral Health Clinic at Mahaska Health Partnership (MHP) in Oskaloosa, Iowa
- Prescribers: NP, PA, DO, & MD
- Patient Visits: 2,458 patient encounters in 2016
- Population: Patients with moderate to severe MDD

Outcomes

- The evidence supporting PGT is rapidly changing.
- The evidence supports the clinical utility of PGT in MDD treatment for those with non-remitting symptoms and multiple medication failures.
- PGT has the potential to positively effect:
  - MDD treatment outcomes
  - Improve patient quality of life
  - Decrease health care costs

Evaluation

- Objective 1: Provide education to prescribers
  - 100% of clinical prescribers attended educational in-service.
  - In-service also presented to all medical providers at MHP.
  - Survey data showed little change in prescriber view of PGT usefulness, likelihood of use, and receptivity.
- Objective 2: Create guidelines for PGT use
  - MDD PGT Use Guideline Created and disseminated.
  - Created EHR template to ensure prescribers document medication failures.
  - Template was not used due to prescribers having their own documentation templates already in place.
- Objective 3: Integrate PGT data into the EHR
  - 117 historical PGT reports were integrated into the EHR.
  - Of the 3 PGT completed during implementation, 2 were uploaded to the EHR.
  - Time demands on support staff and lack of on-site encouragement affected upload rate.

Conclusions

- The evidence supporting PGT is rapidly changing.
- The evidence supports the clinical utility of PGT in MDD treatment for those with non-remitting symptoms and multiple medication failures.
- PGT has the potential to positively effect:
  - MDD treatment outcomes
  - Improve patient quality of life
  - Decrease health care costs

References


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