

# Evaluating the Impact of Interventions by a Multidisciplinary Pediatric Behavioral Health Medication Initiative (PBHMI) Workgroup on Medication Prescribing Trends in a Medicaid Population

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## INTRODUCTION

- In 2011, the U.S. Government Accountability Office (GAO) reported rates of psychotropic prescriptions for foster and non-foster children in Medicaid fee-for-service in five states.
  - Massachusetts exhibited the highest rate of behavioral health medication (BHM) utilization with 49.3% of all Medicaid children being prescribed a psychotropic medication, and 39.1% of children in foster care prescribed these medications.<sup>1</sup>
- In 2012, the U.S. GAO reported a higher prevalence of BHM regimens with ≥5 medications in foster care children. Antipsychotic use in children covered by Medicaid was twice as likely compared to those privately insured.<sup>2</sup>
- The Massachusetts Medicaid (MassHealth) Pharmacy Program, in collaboration with the Department of Children and Families and the Department of Mental Health implemented the PBHMI in November 2014.
  - Proactively requires prior authorization (PA) for specific medications or combinations of BHMs prescribed to members less than 18 years of age.
- A multidisciplinary therapeutic class management (TCM) workgroup consisting of child/adolescent psychiatrists, pharmacists, and a social worker, retrospectively reviews complex cases.
  - Interventions include telephonic prescriber outreach by a child/adolescent psychiatrist to discuss opportunities for regimen simplification, drug interactions or toxicity, and to encourage evidence-based practices.

## OBJECTIVES

- Primary Objective:** To determine the impact of the PBHMI telephonic peer-to-peer outreach program in modifying prescribing trends by assessing the rate of acceptance, modified acceptance, or rejection of medication interventions suggested by the workgroup.
- Secondary Objectives:** To assess the impact of prescriber type and medication class on peer-to-peer outreach outcomes. In addition, to assess prescriber satisfaction with the peer-to-peer outreach process.

## METHODS

- Population Selection**
  - MassHealth members identified as candidates for a peer-to-peer outreach call based upon PBHMI TCM workgroup review during the time period of September 1, 2015 through August 28, 2016 who had continuous coverage throughout the TCM review and no third party liability (TPL).
- Primary Outcome**
  - Case data was utilized to collect the types of interventions, number of peer-to-peer consultations conducted, and suggested medication recommendations.
  - Pharmacy claims and subsequent PA submissions were analyzed to assess medication regimens prior to workgroup intervention, as well as changes to the medication regimen after the peer-to-peer discussion.
  - Peer-to-peer recommendations were categorized as:
    - Acceptance of a recommendation: Change to a regimen discussed during the peer-to-peer
    - Modified acceptance: When ≥1 recommendation was implemented or a prescriber implemented a change that was revised from the original recommendation
    - Rejection: A prescriber did not modify the regimen discussed
- Secondary Outcomes**
  - The rate of acceptance was assessed based upon type of prescriber and the medication class being recommended.
  - An anonymous and voluntary survey was faxed to prescribers who participated in a peer-to-peer to assess prescriber satisfaction.

## DISCUSSION

- Peer-to-peer outreach calls conducted by the TCM workgroup resulted in a medication regimen recommendation acceptance rate of 31.4%, modified acceptance rate of 44.3%, and rejection rate of 24.3%.
- Recommendations made during a peer-to-peer were more likely to be accepted or modified by a non-child/adolescent psychiatrist than a child/adolescent psychiatrist. Recommendations were more likely to be rejected by a child/adolescent psychiatrist than a non-child/adolescent psychiatrist (Figure 2; P=0.4106).
- Antipsychotics were recommended for change most frequently during a peer-to-peer, accounting for 26.8% of recommendations.
- Recommended changes for regimens containing a benzodiazepine had the highest likelihood of prescriber acceptance.
  - All recommendations (N=9) were accepted (P=0.0758).

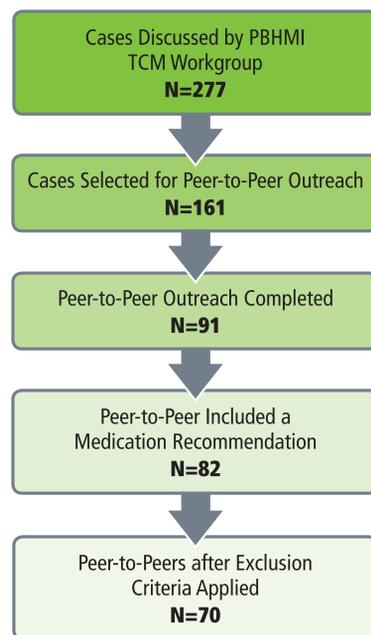
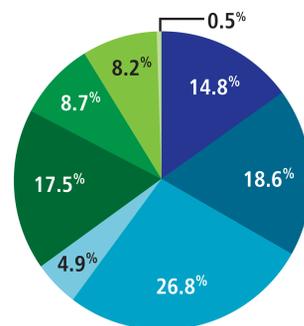


FIGURE 3: Total Peer-to-Peer Recommendations by Drug Class

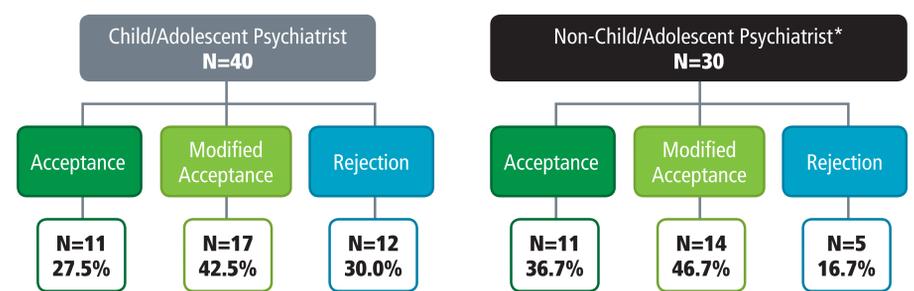


## RESULTS

FIGURE 1: Rate of Acceptance of Medication Regimen Recommendations



FIGURE 2: Comparison of Prescriber Type on Acceptance, Modified Acceptance and Rejection of Medication Regimen Recommendations



\*Non-child/adolescent psychiatrists include: nurse practitioners, neurologists, pediatricians, general or adult psychiatrists.

FIGURE 4: Accepted and Modified Peer-to-Peer Recommendations by Drug Class

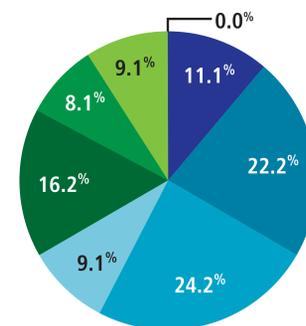
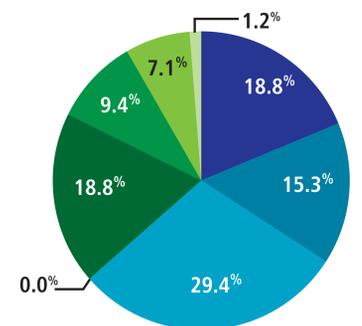


FIGURE 5: Rejected Peer-to-Peer Recommendations by Drug Class



■ Alpha-2 agonist ■ Antidepressant ■ Antipsychotic ■ Benzodiazepine ■ Mood stabilizer ■ Stimulant ■ Other BHM\* ■ Non-BHM\*

\*Other BHMs include atomoxetine, bupropion, benztropine, cyproheptadine, and amantadine. Non-BHMs include metformin.

TABLE 1: Survey Questions Assessing Prescriber Satisfaction with the PBHMI TCM Peer-to-Peer Process

Did you find the peer-to-peer with a PBHMI TCM child/adolescent psychiatrist helpful?	<input type="checkbox"/> YES	<input type="checkbox"/> NO			
How satisfied were you with the scheduling process?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Did the intervention(s) suggested during the peer-to-peer change your approach to managing the individual patient?	<input type="checkbox"/> YES	<input type="checkbox"/> NO			
Did the intervention(s) suggested during the peer-to-peer change your overall approach to managing all patients within your practice?	<input type="checkbox"/> YES	<input type="checkbox"/> NO			
How valuable did you find the amount of time required to participate in the peer-to-peer?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Did the peer-to-peer increase your understanding of additional available resources for patient care?	<input type="checkbox"/> YES	<input type="checkbox"/> NO			
Overall, how satisfied were you with the PBHMI TCM workgroup peer-to-peer process?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

## LIMITATIONS

- Changes to member regimens may not be fully reflected by data collected from pharmacy claims or PA submissions.
- Cases where a peer-to-peer consultation occurred earlier in the study period may have allowed for more interventions to take place, as opposed to peer-to-peers completed towards the end of the study period.
- The PBHMI TCM workgroup routinely reviews cases for members with TPL; however, a lack of access to pharmacy claims data for these members prevents their inclusion in this analysis and therefore, maybe not represent the true impact of the program.
- The sample size during the study period was not large enough to exhibit statistical significance between subgroups.
- Acceptance of recommendations may have been limited by additional factors including a member changing providers, care settings, or a decline in mental health status.
- This is an interim analysis and results for the prescriber survey are pending.

## CONCLUSION

- The results of this analysis suggest a peer-to-peer outreach program is associated with increased awareness and implementation of evidence-based medicine in a pediatric population treated with behavioral health medications.
- The type of prescriber and medication class being recommended for change may have an impact on the likelihood of recommendation acceptance.
- Full results anticipated in May 2017.

## REFERENCES

- GAO Report to Congressional Requesters. Foster Care Children. HHS Guidance could help states improve oversight or psychotropic prescriptions. December 2011. GAO-12-201.
- GAO Report to Congressional Requesters. Children's Mental Health. Concerns remain about appropriate services for children in Medicaid and foster care. December 2012. GAO-13-15.

## DISCLOSURES/ACKNOWLEDGMENTS

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