

Retrospective Evaluation of Preconception Care Intervention Opportunities in a Chain Community Pharmacy Setting

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Background

- **Preconception care** is a set of interventions to identify and reduce risks to a woman's health or pregnancy outcomes through prevention and management.
- Given the increased use of medications to manage chronic disease in women of childbearing age, existing **MTM programs** may provide opportunities to assist pharmacists in the delivery of preconception care services.
- The **purpose of this study** is to identify missed opportunities for pharmacists to provide preconception care support during MTM consultations in a supermarket pharmacy chain.

Methods

- Prescription and MTM claims were pulled for women between the ages of 15 and 45 from the Inmar claims reconciliation platform and the OutcomesMTM™ platform, respectively.
- Patients were included in the analysis if they had at least one prescription claim and one MTM claim between January 1, 2018 and June 30, 2019.
- Data sets were combined and analyzed using Microsoft Access and Microsoft Excel.
- The study was approved through the Ferris State University IRB

Results

- A total of **2,020 women** received at least 1 MTM intervention and had at least 1 prescription claim during the study period.
- The analysis found that **50.5% of the patient population** filled at least 1 medication associated with adverse pregnancy outcomes during the study period.
- When the analysis was modified to consider days-supply for NSAIDs and opioids, **36.2% of patients** had prescription fills that would be considered unsafe in the event of a planned or unplanned pregnancy.

Discussion/Conclusion

- Study findings indicate there is an **opportunity for pharmacist interventions** to avoid drug-related adverse outcomes in pregnancy.
- Pharmacists have an opportunity to enhance preconception care through:
 - **Appropriate counselling** on agents associated with adverse pregnancy outcomes or through **targeted interventions** flagged by MTM systems.
 - Increasing provision of **hormonal contraception** under pharmacist prescribing, collaborative practice agreements, or statewide protocols.



The authors of this presentation have no perceived conflicts of interest to disclose.

KEY FINDING

In a review of female patients between the ages of 15 and 45 who received MTM services, **more than half** filled a prescription associated with **adverse pregnancy outcomes** in the 18-month study period.

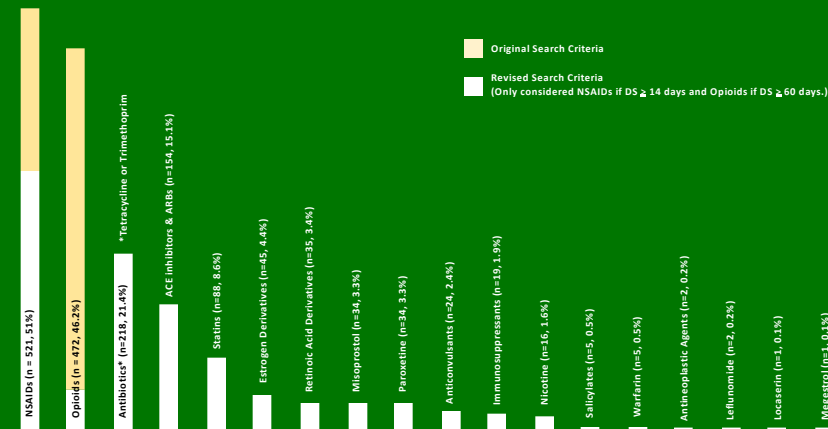


Table 1: Frequency of Patients Taking Medications Associated with Adverse Pregnancy Outcomes

Metric	Original Search Criteria		Revised Search Criteria	
	N	%	N	%
Patients filling at least one unsafe medication	1,021	50.5%	731	36.2%
Patients filling at least one unsafe medication with no evidence of taking hormonal contraception	713	35.3%	509	25.2%
Patients filling at least one unsafe medication and at least one fill of a prenatal vitamin or folic acid	101	5.0%	74	3.7%
Patients filling at least one unsafe medication and completing a comprehensive medication review with a pharmacist or intern	439	21.7%	356	17.6%

Table 2: Summary of MTM Interventions Conducted in patients age 15 to 45 from January 1, 2018 to June 30, 2019

MTM Intervention	Count	
Comprehensive Medication Reviews	955	
Targeted Intervention Program	3710	
Targeted Intervention	Flagged as TIP	Pharmacist Initiated
Adherence	979	12
Adverse Drug Reaction	10	0
Cost-Effective Alternative	29	5
Dose Too High/Low	0	3
Drug Interaction	0	4
Needs Drug Therapy	30	4
Needs Immunization	2	33
Needs Medication Assessment	2	0
Needs Medication Synchronization	2	0
Needs Patient Education	7	0
Needs Refill	2	0
New or Change Rx/OTC Therapy	0	2555
Suboptimal Drug	25	2
Unnecessary Prescription Therapy	0	4

Limitations: Study only evaluated prescription claims filled within the community pharmacy chain. Researchers did not have data related to OTC purchases or use of alternative forms of contraception. Study population was largely covered by commercial insurance and the majority of patients received services in Michigan.