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### Follow-Up: Provision of Buprenorphine to Pregnant Women by For-Profit Clinics in an Appalachian City

Hannah Holt

*East Tennessee State University*

Martin E. Olsen

*East Tennessee State University*

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# Follow-Up: Provision of Buprenorphine to Pregnant Women by For-Profit Clinics in an Appalachian City

Hannah D Holt, Dr. Martin E Olsen MD,

## Abstract

**Objective:** This study was completed as a follow up to research regarding buprenorphine Medication Assisted Therapy (MAT) in Johnson City Tennessee for-profit clinics. We wished to determine the practice patterns over the last three years.

**Methods:** Johnson City for-profit Medical Assisted Therapy clinics were called with a telephone survey. When the clinic representative answered the phone, they were asked questions regarding patient costs for therapy, insurance coverage, counseling offered on site, and opportunities for tapering while 20 weeks pregnant.

**Results:** At all the MAT clinics contacted, the representative informed us that tapering in pregnancy could be considered contrary to current national guidelines. 43% of the clinics are now accepting insurance as compared to 0% in the 2016 study. The average weekly cost per visit remained consistent.

**Conclusion:** The concept of tapering buprenorphine during pregnancy appears to have become a standard of care for this community and it is offered at all of the clinics that were contacted, some even require it, even though national organizations such as American College of Obstetricians and Gynecologists and American Society of Addiction Medicine; do not recommend this approach. Patients who have insurance including government funded insurance, are now able to obtain buprenorphine with no out of pocket expense at numerous clinics. The high cost for the uninsured patient continues to create an environment conducive to buprenorphine diversion.

Map 1: Incidence of NAS among TennCare Recipients - 2017



Rate of NAS per 1,000 Births: 0 - 4.9, 5 - 9.9, 10 - 19.9, 20 - 29.9, 30 - 39.9, 40 - 49.9, 50 +  
**Fig 1. Impact of Neonatal Abstinence Syndrome in Appalachia in 2017**

## Introduction

Neonatal Abstinence Syndrome (NAS) occurs when newborn infants withdraw from medications. In 2019 most of the cases of NAS in Tennessee were related to prescribed medication assisted therapy. 49.7% of the cases documented had only the prescribed substance evident at time of delivery, while 20.7% of the cases were polysubstance with the prescribed substance in addition to other illicit substances. In a comparison by region North East Tennessee by far surpassed the other regions in regard to percent of opioid exposed pregnancies; nearly 10% of pregnancies in are opioid exposed in Sullivan county.

The national guidelines from ACOG and ASAM advice that women who are pregnant should remain on the same dose of MAT throughout pregnancy arguing that the risk of relapse and overdose are high. Since buprenorphine is the primary drug of exposure in northeast Tennessee the consequence of relapse is lower than other regions. The rate of NAS in East Tennessee as a result of prescribed substances warrant an investigation into whether or not the national guidelines apply in this community.

## Methods

A list of providers prescribing buprenorphine was accessed online at U.S Department of Health and Human Services. Each clinic was contacted by telephone and we spoke with the receptionist asking a series of predetermined questions. The questions were pertaining to the prices, requirements for weekly visits, willingness to provide care to pregnant patients, ability to provide care during tapering, and availability of counseling on site. Some clinics have more than one provider on the list, each location was called only once. It is expected that the receptionists may be lacking in complete answers, however this collection method mimics what a patient would receive as they sought care for themselves.

## Survey

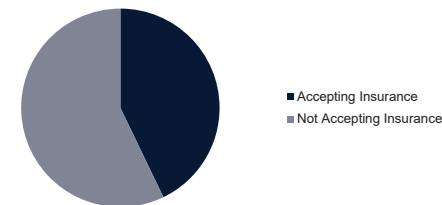
- How much will treatment cost at the initial visit?
- How much will treatment be for subsequent visits?
- Are weekly visits a requirement for treatment?
- How much do biweekly and monthly visits for treatment cost?
- Do you accept insurance?
- Is tapering offered to pregnant patients?
- Is counseling provided at the clinic?

## Results

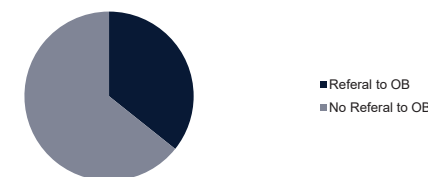
Clinic	Cost at Initial visit	Cost Weekly	Cost Biweekly	Cost Monthly
1	\$40*	n/a*	n/a*	N/a*
2	\$100	\$100	\$200	\$300
3	\$100	\$100	\$175	\$325
4	\$120	\$120	n/a	\$400
5	\$75	\$150	n/a	\$295
6	\$250	\$250	n/a	n/a
7	\$175	n/a	\$175	\$325
8	\$150	\$100	n/a	n/a
9	\$125	\$100	\$175	\$325
10	\$150	\$100	\$150	\$300
11	\$200	\$100	n/a	\$300
12	\$100	n/a	n/a	n/a
13	\$175	n/a	\$175	\$325
14	\$160	\$105	\$210	\$310

Table 1: Survey results from 14 Washington County MAT clinics  
\*this clinic would not share additional visit cost over the phone

### MAT Clinics Accepting Insurance



### MAT clinics referring buprenorphine management of pregnant women to ETSU OB/gyn department



## Comparison of data

Similar to the former study, tapering is an accepted practice at for-profit clinics. However, since the previous study, some MAT clinics have started referring their patients to ETSU obstetricians for management of MAT.

Out of the fourteen clinics contacted six are now accepting insurance. The insurance is available to all pregnant patients in the state and would provide them low cost to free of charge buprenorphine while pregnant. The coverage of buprenorphine for pregnant patients is an increasing trend.

## Conclusion

While Johnson city obstetricians have decided against some national guidelines, this study showed that MAT clinic providers are seeking to provide care specific for the community and have rejected the ACOG and ASAM management guidelines.

The Increasing rate of NAS as a result of prescribed buprenorphine in East Tennessee have impacted the local health care economy and put a strain on resources. The writers of national guidelines are most concerned with potential relapse and overdose rates. While valid concerns during a taper, local providers have sought solutions to a high NAS rate by offering women the opportunity to taper. Since 2016 the rate of NAS in Johnson City has been trending down possibly impart to local providers providing individualized care to women seeking to taper down or completely off of buprenorphine before delivery.

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