reading\_TEDS\_2017\_women\_admissions\_20200926\_opioid

Harold Pollack

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This program updates to 2017 data the results reported here <https://www.samhsa.gov/data/sites/default/files/report_2724/ShortReport-2724.html> from the 2012 Treatment Episodes Data Set using data from the 2017 TEDS Admissions data file. This is the dataset of admissions at speciality treatment providers who receive at least some public funding or reimbursement. It does not include physician/NP office-based medication opioid use disorder treatment. So the methadone numbers are more comprehensive than those for buprenorphine/suboxone.Note that the numbers below are treatment admissions, not unique individual patients. Some patients have multiple episodes that are not distinguished within these data.

From the TEDS codebook: The Treatment Episode Data Set (TEDS) system serves as a repository of treatment data routinely collected by states for the purposes of monitoring their substance use treatment systems. It is comprised of selected data items from states’ administrative records that are converted to a standardized format which is consistent across all states. These standardized data constitute TEDS. The TEDS system is comprised of two major components: the admissions data set (TEDS-A) and the discharges data set (TEDS-D).

Further information may also be found here: <https://www.ncbi.nlm.nih.gov/books/NBK541398/> Data unzipped from <https://www.datafiles.samhsa.gov/sites/default/files/field-uploads-protected/studies/TEDS-A-2017/TEDS-A-2017-datasets/TEDS-A-2017-DS0001/TEDS-A-2017-DS0001-bundles-with-study-info/TEDS-A-2017-DS0001-bndl-data-tsv.zip>

Program that includes opioid disorder admits or primary substance of misuse is (5,6,7)

mydata <- read.csv("/Users/haroldpollack/Documents/TEDS/tedsa\_puf\_2017.csv")  
myvars <- c("SERVICES", "METHUSE", "DSMCRIT","HERFLG","STFIPS","SUB1","AGE","GENDER","PREG")  
newdata <- mydata[myvars]  
#  
# dopioid captures opioid dependence and abuse dx  
# In contrast, dopioid2 captures primary substance of use (SUB1) in the heroin/opioid space  
# I keep everyone who has either dopioid or dopioid2  
# HERFLG is a heroin use flag  
# Data from https://www.datafiles.samhsa.gov/study-dataset/treatment-episode-data-set-admissions-2017-teds-2017-ds0001-nid18474  
#  
#  
newdata$dopioid<-(newdata$DSMCRIT==5|newdata$DSMCRIT==12)  
#  
# opioid dependence is DSMCRIT=5  
# opioid abuse is DSMCRIT=12  
#  
newdata$dopioid2<-(newdata$SUB1==5|newdata$SUB1==6|newdata$SUB1==7)  
newdata <- newdata[ which(newdata$dopioid==TRUE |newdata$dopioid2==TRUE ), ]  
nobs\_opioid<-nrow(newdata)  
print( paste("Number of admissions to TEDS-reporting heroin/opioid treatment--inclusive definition: ", nobs\_opioid))

## [1] "Number of admissions to TEDS-reporting heroin/opioid treatment--inclusive definition: 712170"

tab <- with(newdata, table(HERFLG,SERVICES))  
#tab  
table(newdata$dopioid,newdata$dopioid2)

##   
## FALSE TRUE  
## FALSE 0 307911  
## TRUE 30096 374163

newdata$dheroin<-(newdata$SUB1==5)  
tab\_heroin<- with(newdata, table(dheroin,SERVICES))  
prop.table(tab\_heroin, margin = 1)

## SERVICES  
## dheroin 1 2 3 4 5 6  
## FALSE 0.023560209 0.138804985 0.003881953 0.087394281 0.046795991 0.115160872  
## TRUE 0.033766784 0.216620359 0.002105386 0.090878413 0.074582766 0.103148892  
## SERVICES  
## dheroin 7 8  
## FALSE 0.568253009 0.016148700  
## TRUE 0.458812810 0.020084590

#  
# METHUSE: Planned medication-assisted opioid therapy  
#  
# This field identifies whether the use of opioid medications such as methadone, buprenorphine,  
#  
tab\_METHUSE<- with(newdata, table(dheroin,METHUSE))  
tab\_METHUSE

## METHUSE  
## dheroin -9 1 2  
## FALSE 5367 57227 116182  
## TRUE 15060 210853 307481

table(newdata$METHUSE)

##   
## -9 1 2   
## 20427 268080 423663

table(newdata$METHUSE,newdata$SERVICES)

##   
## 1 2 3 4 5 6 7 8  
## -9 147 5714 7 3473 2083 5034 3711 258  
## 1 516 15754 184 11137 8633 12237 210845 8774  
## 2 21560 118891 1626 49488 37432 58336 131762 4568

tab\_METHUSE2<- with(newdata, table(METHUSE,SERVICES))  
prop.table(tab\_METHUSE2, margin = 1)

## SERVICES  
## METHUSE 1 2 3 4 5  
## -9 0.0071963578 0.2797278112 0.0003426837 0.1700200715 0.1019728790  
## 1 0.0019247986 0.0587660400 0.0006863623 0.0415435691 0.0322030737  
## 2 0.0508895042 0.2806263469 0.0038379561 0.1168098229 0.0883532430  
## SERVICES  
## METHUSE 6 7 8  
## -9 0.2464385372 0.1816713174 0.0126303422  
## 1 0.0456468218 0.7865002984 0.0327290361  
## 2 0.1376943467 0.3110066255 0.0107821547

table(newdata$HERFLG)

##   
## 0 1   
## 157718 554452

Now restrict to Women

newdata <- newdata[ which(newdata$GENDER==2), ]  
nobs\_women<-nrow(newdata)  
print( paste("Number of women admissions to TEDS-reporting heroin/opioid treatment: ", nobs\_women))

## [1] "Number of women admissions to TEDS-reporting heroin/opioid treatment: 275563"

table(newdata$SERVICES)

##   
## 1 2 3 4 5 6 7 8   
## 7261 44061 747 23832 18046 31194 145870 4552

tab <- with(newdata, table(HERFLG,SERVICES))  
tab

## SERVICES  
## HERFLG 1 2 3 4 5 6 7 8  
## 0 1758 8495 274 5769 3259 8136 44728 1268  
## 1 5503 35566 473 18063 14787 23058 101142 3284

table(newdata$dopioid,newdata$dopioid2)

##   
## FALSE TRUE  
## FALSE 0 110969  
## TRUE 11920 152674

newdata$dheroin<-(newdata$SUB1==5)  
tab\_heroin<- with(newdata, table(dheroin,SERVICES))  
tab\_heroin

## SERVICES  
## dheroin 1 2 3 4 5 6 7 8  
## FALSE 2000 9470 316 6723 3767 9527 49028 1338  
## TRUE 5261 34591 431 17109 14279 21667 96842 3214

tab\_METHUSE<- with(newdata, table(dheroin,METHUSE))  
tab\_METHUSE

## METHUSE  
## dheroin -9 1 2  
## FALSE 2194 28646 51329  
## TRUE 4924 83450 105020

table(newdata$METHUSE)

##   
## -9 1 2   
## 7118 112096 156349

table(newdata$HERFLG)

##   
## 0 1   
## 73687 201876

Now restrict to women of childbearing age

newdata <- newdata[ which(newdata$AGE>=3 & newdata$AGE<=8 ), ]  
nobs\_women\_childbearing<-nrow(newdata)  
print( paste("Number of women 18-44 admissions to TEDS-reporting heroin/opioid treatment: ", nobs\_women\_childbearing))

## [1] "Number of women 18-44 admissions to TEDS-reporting heroin/opioid treatment: 221566"

table(newdata$SERVICES)

##   
## 1 2 3 4 5 6 7 8   
## 5945 37699 616 20509 16193 26310 110784 3510

tab <- with(newdata, table(HERFLG,SERVICES))  
tab

## SERVICES  
## HERFLG 1 2 3 4 5 6 7 8  
## 0 1412 7038 226 4821 2771 6830 35710 934  
## 1 4533 30661 390 15688 13422 19480 75074 2576

table(newdata$dopioid,newdata$dopioid2)

##   
## FALSE TRUE  
## FALSE 0 91753  
## TRUE 9776 120037

newdata$dheroin<-(newdata$SUB1==5)  
tab\_heroin<- with(newdata, table(dheroin,SERVICES))  
tab\_heroin

## SERVICES  
## dheroin 1 2 3 4 5 6 7 8  
## FALSE 1599 7885 262 5640 3220 7968 39274 992  
## TRUE 4346 29814 354 14869 12973 18342 71510 2518

tab\_METHUSE<- with(newdata, table(dheroin,METHUSE))  
tab\_METHUSE

## METHUSE  
## dheroin -9 1 2  
## FALSE 1797 22107 42936  
## TRUE 4376 59926 90424

table(newdata$METHUSE)

##   
## -9 1 2   
## 6173 82033 133360

table(newdata$HERFLG)

##   
## 0 1   
## 59742 161824

Now restrict to pregnant women

newdata <- newdata[ which(newdata$PREG==1), ]  
nobs\_preg\_women<-nrow(newdata)  
print( paste("Number of pregnant women 18-44 admissions to TEDS-reporting heroin/opioid treatment: ", nobs\_preg\_women))

## [1] "Number of pregnant women 18-44 admissions to TEDS-reporting heroin/opioid treatment: 11855"

table(newdata$SERVICES)

##   
## 1 2 3 4 5 6 7 8   
## 126 806 43 987 1276 1317 7240 60

tab <- with(newdata, table(HERFLG,SERVICES))  
tab

## SERVICES  
## HERFLG 1 2 3 4 5 6 7 8  
## 0 48 183 16 225 273 330 1934 14  
## 1 78 623 27 762 1003 987 5306 46

table(newdata$dopioid,newdata$dopioid2)

##   
## FALSE TRUE  
## FALSE 0 5022  
## TRUE 406 6427

newdata$dheroin<-(newdata$SUB1==5)  
tab\_heroin<- with(newdata, table(dheroin,SERVICES))  
tab\_heroin

## SERVICES  
## dheroin 1 2 3 4 5 6 7 8  
## FALSE 50 207 19 276 315 393 2154 15  
## TRUE 76 599 24 711 961 924 5086 45

tab\_METHUSE<- with(newdata, table(dheroin,METHUSE))  
tab\_METHUSE

## METHUSE  
## dheroin -9 1 2  
## FALSE 94 1511 1824  
## TRUE 158 4738 3530

table(newdata$METHUSE)

##   
## -9 1 2   
## 252 6249 5354

table(newdata$HERFLG)

##   
## 0 1   
## 3023 8832