Opioid Overdoses Among High-Risk Medicaid Members: Healthcare Cost, Service Utilization, and Risk Factor Analysis

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Opioid Overdoses Among High-Risk Medicaid Members: Healthcare Cost, Service Utilization, and Risk Factor Analysis

OBJECTIVES

- Examine the demographics, clinical, and overdose outcomes profile among high-risk populations
- Explore services utilized and cost
- Examine health status, service utilization, and prescription drug use
- Analyze Risk Factors
- Conduct multivariate analysis of fatal and non-fatal opioid overdose outcomes of high-risk populations
- Explore service utilization
- Determine sociodemographic characteristics and age engagement

BACKGROUND

- Over 75% of individuals involved in the criminal justice system also experienced a diagnosis of substance use disorder (SUD) or mental health (MH) disorder.
- Explore Service Utilization
- Demographics
- Risk Factors
- STDUY DESIGN

Data Source: Public Health Data (PHD) Warehouse

- MassHealth data warehouse

- Remit linkage and analysis of multiple government data sets to better understand the opioid epidemic:
  - MassHealth: membership, eligibility, and enrollment data; service claims and medical data
  - Asists in guiding policy development and making programmatic decisions

Study Population

- Individuals ages 11-64 enrolled in MassHealth who were considered high risk

Data Analysis

- Fatal and non-fatal opioid overdose
  - Independent variables: high-risk population group status, mental health diagnoses, chronic medical conditions, and engagement with the criminal justice system
  - Dependent variables: fatal and non-fatal opioid overdose

SERVICE USE

Frequency Distributions of the Number of Months at Healthcare Utilization for MassHealth Members Ages 11-64 in the 6 Months Before and 12 Months After a Third Non-Fatal Overdose: 2011-2013 (n=1,955,546)

Factors Associated with Making a Total Opioid Overdose Only: MassHealth Members, Ages 11-64: 2011-2013 (n=108)

Factors Associated with Making a Non-Fatal Opioid Overdose Only: MassHealth Members, Ages 11-64: 2011-2013 (n=14,115)

RISK FACTOR ANALYSIS

Multivariate Logistic Regression Analyses

- All independent variables were entered into the logistic regression models
- Non-fatal overdose (NFO)
- Fatal overdose (FO)
- Elderly
- Non-elderly

Healthcare Expenditures

4-Year Average Massachusetts Paid Claims Per Member Per Month (PMPM) by Opioid Overdose Status Among Homeless, Criminal Justice Involved Members, and Criminal Justice Involved Members: MassHealth-Derived, 2011-2015

Conclusions

- Opioid overdose risk was twice to three times higher among homelessness individuals and newly homeless than high-risk population members
- All findings agree on the role of opioid overdose as a primary contributor to healthcare utilization among these individuals
- Multivariate analyses consistently showed that gender (male) and race were significantly associated with increased healthcare utilization

Limitations

- Fatal and non-fatal overdose estimates were made using administrative data from the MassHealth claims database
- Findings reflect Massachusetts’s understanding of inmates’ experiences regarding medical and BH services and identification of risk factors patterns of overdose may help policy makers improve services

IMPLICATIONS FOR POLICY/RACTICE

- Understanding opioid overdose risk factors and determining appropriate interventions and gaps and missed opportunities are important
- As a framework for a common platform, this data is useful for policymakers and community planners for medication assistance programs to prevent overdose
- For our study, it developed as an in-depth descriptive analysis of individuals with SUD, OUD, or both, who died from an opioid overdose
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- The study is not a comprehensive look at opioid overdose across the state

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