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import pandas as pd

# Evidence Based
paper_data1 = {
    "Title": "A Call For Evidence-Based Medical Treatment Of Opioid
Dependence In The United States And Canada",

    "Year": 2013,
    "Journal": "Health Affairs",
    "Methodology": "Analysis and Commentary",
    "Research Question": "How to bridge the gap between current practices
and evidence-based standards in opioid dependence treatment in Canada and
the U.S.?",
    "Policy Implication 1": "Eliminate restrictions on office-based
methadone prescribing in the U.S.",
    "Policy Implication 2": "Reduce financial barriers to treatment
through insurance coverage",
    "Policy Implication 3": "Decrease reliance on less effective opioid
detoxification",
    "Policy Implication 4": "Evaluate and integrate emerging treatments
like slow-release buprenorphine implants",
    "Policy Implication 5": "Expand treatment to office-based settings
for increased access",
    "Result 1": "Less than 10% of opioid-dependent individuals in the
U.S. receive substitution treatment",
    "Result 2": "Only 40% of U.S. facilities offer partial payment
assistance",
    "Result 3": "High risk of relapse and mortality following
detoxification",
    "Result 4": "Methadone and buprenorphine shown to be effective in
numerous studies",
    "Result 5": "Canada saw great increases in access after implementing
office-based treatments"
}

paper_data2 = {
    "Title": "Acceptability and Willingness to Pay for Contingency
Management Interventions Among Parents of Young Adults with Problematic
Opioid Use",
    "Year": 2020,
    "Journal": "Drug and Alcohol Dependence",
    "Methodology": "Web-based survey",

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    "Research Question": "Parents' perceptions of incentives,
acceptability, and willingness to pay for CM as a treatment for substance
use among young adults with opioid problems",
    "Policy Implication 1": "Implement CM for opioid use in the context
of methadone maintenance and detoxification",
    "Policy Implication 2": "Address financial barriers to CM
implementation in community settings",
    "Policy Implication 3": "Focus on parents' willingness to pay for CM
as a part of treatment programs",
    "Policy Implication 4": "Tailor CM interventions for young adults
aged 18-35, a high-risk group for opioid overdose",
    "Policy Implication 5": "Integrate parents' perspectives on CM and
12-step programs into treatment plans",
    "Result 1": "Increase in opioid overdose deaths, with synthetic
opioids involved in over half of the cases",
    "Result 2": "Major barrier to CM implementation is its maintenance
cost",
    "Result 3": "Parents willing to pay median amounts of $300-$375 per
month for CM",
    "Result 4": "Parents willing to pay for up to 12 months on average
for successful treatment programs",
    "Result 5": "Limitations include broad assessment of willingness to
pay and focus on perceptions of CM vs. 12-step programs"
}

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paper_data3 = {
    "Title": "Addressing the Opioid Epidemic With Behavioral
Interventions for Adolescents and Young Adults: A Quasi-Experimental
Design",
    "Year": 2019,
    "Journal": "Journal of Consulting and Clinical Psychology",
    "Main Methodology": "Quasi-Experimental Design",
    "Research Question": "Which behavioral interventions are most
effective for youth with opioid use disorder, and do treatment responses
vary by developmental age or sex?",
    "Policy Implication 1": "Implement MET/CBT and TAU treatments as they
are more effective than A-CRA for youth opioid use disorder.",
    "Policy Implication 2": "Tailor treatment interventions based on sex
and age to improve outcomes.",
    "Policy Implication 3": "Focus on intervention fidelity and minimize
biases in treatment delivery.",
    "Policy Implication 4": "Utilize propensity weighting for comparing
different treatment modalities.",
    "Policy Implication 5": "Increase awareness and education about
opioid misuse risks among adolescents and young adults.",
    "Result 1": "MET/CBT and TAU outperform A-CRA in reducing latency to
opioid use.",
    "Result 2": "Variability in treatment effectiveness based on patient
sex and age.",
    "Result 3": "High prevalence of opioid misuse among U.S. adolescents
and young adults.",
    "Result 4": "Differential hazard rates for opioid use based on
treatment type.",
}

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    "Result 5": "Potential biases and reliance on self-report measures in studies."  
}
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paper_data4 = {  
  "Title": "Adoption and Diffusion of Evidence-Based Addiction Medications in Substance Abuse Treatment",  
  "Year": "Not Specified",  
  "Journal": "Health Services Research",  
  "Main Methodology": "Ordered logit and multinomial logit models",  
  "Research Question": "Roles of facility- and state-level factors in the adoption and diffusion of pharmaceutical agents in addiction treatment.",  
  "Policy Implication 1": "Enhance awareness and dissemination of information about addiction pharmacotherapies.",  
  "Policy Implication 2": "Address the slow adoption of addiction medications due to economic pressures.",  
  "Policy Implication 3": "Promote geographical clustering and licensing/accreditation to legitimize pharmacotherapy adoption.",  
  "Policy Implication 4": "Influence state Medicaid policies to make addiction medications more available.",  
  "Policy Implication 5": "Implement state health insurance parity laws for substance abuse treatment coverage.",  
  "Result 1": "Variation in adoption rates of disulfiram, naltrexone, and buprenorphine among treatment facilities.",  
  "Result 2": "Economic pressures and managed care impact treatment practices.",  
  "Result 3": "External pressures and environmental influences are key in adopting innovations.",  
  "Result 4": "Low levels of adoption rates for disulfiram and naltrexone.",  
  "Result 5": "State variation in policies affects the availability of addiction medications."  
}
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```
paper_data5 = {  
  "Title": "Adoption of Evidence-Based Clinical Innovations: The Case of Buprenorphine Use by Opioid Treatment Programs",  
  "Year": 2014,  
  "Journal": "Medical Care Research and Review",  
  "Main Methodology": "Model of the adoption of clinical innovations",  
  "Research Question": "How are work needs, organizational support, market dynamics, and state policies influencing the adoption of buprenorphine in opioid treatment programs?",  
  "Policy Implication 1": "Support the adoption of buprenorphine in for-profit, privately funded, and office-based treatment settings.",  
  "Policy Implication 2": "Encourage organizations with compatible infrastructure to adopt buprenorphine.",  
  "Policy Implication 3": "Consider market dynamics like demand and competition in adoption decisions.",  
  "Policy Implication 4": "Incentivize states to offer subsidies for buprenorphine provision.",  
}
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    "Policy Implication 5": "Address reverse causation in states imposing
additional requirements for prescribing buprenorphine.",
    "Result 1": "Increase in buprenorphine use for detoxification and
maintenance therapy from 2005 to 2011.",
    "Result 2": "Environmental factors impacting the decision to adopt
buprenorphine.",
    "Result 3": "Local supply and demand significantly influence
buprenorphine adoption.",
    "Result 4": "States with special requirements report more usage for
maintenance therapy.",
    "Result 5": None
}
```

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paper_data6 = {
    "Title": "Adoption of Injectable Naltrexone in U.S. Substance Use
Disorder Treatment Programs",
    "Year": 2015,
    "Journal": "Journal of Studies on Alcohol and Drugs",
    "Main Methodology": "Interview data from a sample of 307 U.S. SUD
treatment programs",
    "Research Question": "Document the prevalence of adoption and
implementation of extended-release injectable naltrexone and examine
associations between organizational and patient characteristics and
adoption",
    "Policy Implication 1": "Increase training and awareness about
injectable naltrexone among SUD treatment providers.",
    "Policy Implication 2": "Develop financial strategies to overcome
cost barriers for injectable naltrexone adoption.",
    "Policy Implication 3": "Enhance support for wraparound services in
treatment programs to improve naltrexone adoption.",
    "Policy Implication 4": "Address negative perceptions and barriers in
for-profit and inpatient service settings towards injectable
naltrexone.",
    "Policy Implication 5": "Improve insurance coverage for injectable
naltrexone to enhance patient access.",
    "Result 1": "Low adoption rates in treatment programs, particularly
for opioid use disorder.",
    "Result 2": "Effective in reducing substance use but faces barriers
in implementation.",
    "Result 3": "Association between wraparound services, private
insurance, and higher adoption rates.",
    "Result 4": "For-profit status and inpatient services negatively
impact adoption.",
    "Result 5": "Cost identified as a significant barrier by majority of
adopting organizations."
}
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paper_data7 = {
    "Title": "A Meta-Analytic Review of Psychosocial Interventions for
Substance Use Disorders",
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"Year": 2008,
"Journal": "American Journal of Psychiatry",
"Main Methodology": "Meta-Analysis",
"Research Question": "Effectiveness of various psychosocial
treatments for substance use disorders (cannabis, cocaine, opiate,
polysubstance abuse)",
"Policy Implication 1": "Focus on combining cognitive behavior
therapy with contingency management for improved treatment outcomes.",
"Policy Implication 2": "Tailor psychosocial interventions to target
specific substances for greater efficacy.",
"Policy Implication 3": "Implement shorter-duration treatments for
more substantial effects.",
"Policy Implication 4": "Focus treatment strategies on younger
individuals for higher success rates.",
"Policy Implication 5": "Improve strategies for maintaining treatment
attendance and reducing dropout rates.",
"Result 1": "Moderate overall effectiveness of psychosocial
treatments across different substances.",
"Result 2": "Variability in treatment effectiveness based on the type
of substance abuse.",
"Result 3": "High effectiveness of treatments combining cognitive
behavior therapy and contingency management.",
"Result 4": "Substantial proportion of patients achieving
posttreatment abstinence.",
"Result 5": "Correlation between age, treatment duration, and years
of substance use with treatment outcomes."
}
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```
paper_data8 = {
  "Title": "A Randomized Trial of Cognitive Behavioral Therapy in
Primary Care-based Buprenorphine",
  "Year": 2013,
  "Journal": "The American Journal of Medicine",
  "Main Methodology": "24-week randomized clinical trial",
  "Research Question": "Impact of cognitive behavioral therapy on
outcomes in primary care office-based buprenorphine/naloxone treatment of
opioid dependence",
  "Policy Implication 1": "Evaluate the necessity of additional
cognitive behavioral therapy in buprenorphine treatment.",
  "Policy Implication 2": "Focus on enhancing physician management
techniques for opioid dependence treatment.",
  "Policy Implication 3": "Investigate ancillary counseling services'
roles in opioid treatment settings.",
  "Policy Implication 4": "Assess the effectiveness of treatment
approaches for cocaine use alongside opioid dependence.",
  "Policy Implication 5": "Adopt a selective approach to using
counseling services in combination with buprenorphine treatment.",
  "Result 1": "Significant reduction in opioid use frequency with
buprenorphine treatment.",
  "Result 2": "No added benefits of cognitive behavioral therapy for
opioid abstinence or treatment retention.",
  "Result 3": "Similar outcomes in opioid-negative urine tests
regardless of additional cognitive therapy.",
}
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    "Result 4": "No significant differences in cocaine abstinence between
different treatment groups.",
    "Result 5": "Effective opioid treatment in primary care settings
without extensive counseling services."
}
```

```
paper_data9 = {
  "Title": "A Systematic Review of Rural-specific Barriers to
Medication Treatment for Opioid Use Disorder in the United States",
  "Year": 2020,
  "Journal": "The American Journal of Drug and Alcohol Abuse",
  "Main Methodology": "Systematic Review",
  "Research Question": "Identifying rural-specific barriers to
medication treatment for opioid use disorder (OUD)",
  "Policy Implication 1": "Improve access to medication treatment
centers in rural areas.",
  "Policy Implication 2": "Address higher rates of Neonatal Abstinence
Syndrome in rural pregnant women.",
  "Policy Implication 3": "Increase provider education to enhance
motivation and reduce cost barriers in buprenorphine treatment.",
  "Policy Implication 4": "Address the shortage of opioid agonist
treatment options in rural areas.",
  "Policy Implication 5": "Promote structured buprenorphine treatment
in rural health centers.",
  "Result 1": "Significant increase in opioid-related deaths in rural
communities.",
  "Result 2": "Limited implementation of medication treatment in rural
U.S. communities.",
  "Result 3": "Consumer-focused barriers include distance to treatment
centers.",
  "Result 4": "Rural settings have fewer Opioid Treatment Programs and
waivered physicians.",
  "Result 5": "Rural patients often travel farther distances for
treatment."
}
```

```
paper_data10 = {
  "Title": "A Systematic Review on the Use of Psychosocial
Interventions in Conjunction With Medications for the Treatment of Opioid
Addiction",
  "Year": 2016,
  "Journal": "Journal of Addiction Medicine",
  "Main Methodology": "Systematic Review",
  "Research Question": "Effectiveness of various psychosocial
treatments used alongside medications for opioid addiction",
  "Policy Implication 1": "Enhance research on the integration of
psychosocial interventions with Methadone Maintenance Treatment.",
  "Policy Implication 2": "Focus on Contingency Management and
Cognitive Behavioral Therapy in conjunction with medication treatments.",
  "Policy Implication 3": "Assess the incremental utility of
psychosocial interventions in medication-based treatments.",
}
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"Policy Implication 4": "Address gaps in the literature regarding the
use of concurrent psychosocial interventions with buprenorphine.",
"Policy Implication 5": "Strengthen support for the efficacy of
psychosocial interventions alongside medications.",
"Result 1": "Positive effects of psychosocial treatment on treatment
attendance and drug use in conjunction with MMT.",
"Result 2": "Varied efficacy of delivering psychosocial treatment
with buprenorphine treatment.",
"Result 3": "Support for the use of psychosocial interventions in MMT
context.",
"Result 4": "Less robust support for concurrent psychosocial
interventions with buprenorphine.",
"Result 5": "Significant gaps and areas for future research in the
field."
}
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```
paper_data11 = {
  "Title": "Acute Care Prescription Opioid Use and Overdose Following
Discontinuation of Long-Term Buprenorphine Treatment for Opioid Use
Disorder",
  "Year": 2020,
  "Journal": "American Journal of Psychiatry",
  "Main Methodology": "Retrospective Longitudinal Cohort Analysis",
  "Research Question": "Health outcomes following the discontinuation
of buprenorphine treatment",
  "Policy Implication 1": "Extend buprenorphine treatment beyond 15
months for better health outcomes.",
  "Policy Implication 2": "Implement strategies to reduce emergency
department visits post-buprenorphine discontinuation.",
  "Policy Implication 3": "Focus on reducing the risk of overdose after
buprenorphine treatment discontinuation.",
  "Policy Implication 4": "Develop post-treatment support systems to
manage adverse health events.",
  "Policy Implication 5": "None",
  "Result 1": "High rates of emergency department visits post-
buprenorphine discontinuation.",
  "Result 2": "Lower odds of adverse events with longer treatment
durations.",
  "Result 3": "Persistent high risk of acute care service use and
overdose post-discontinuation.",
  "Result 4": "None",
  "Result 5": "None"
}
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paper_data12 = {
  "Title": "Behavioral Family Counseling and Naltrexone for Male
Opioid-Dependent Patients",
  "Year": 2003,
  "Journal": "Journal of Consulting and Clinical Psychology",
  "Main Methodology": "Randomized Controlled Trial",
  "Research Question": "Effectiveness of Behavioral Family Counseling
(BFC) with Naltrexone treatment for opioid-dependent patients",
}
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    "Policy Implication 1": "Integrate family involvement in opioid
dependence treatment programs.",
    "Policy Implication 2": "Enhance patient compliance with medication
through voucher-based incentive programs.",
    "Policy Implication 3": "Adopt Behavioral Naltrexone Therapy in
treatment protocols.",
    "Policy Implication 4": "Implement behavioral contracts in family
counseling for better clinical outcomes.",
    "Policy Implication 5": "None",
    "Result 1": "BFC patients showed improved treatment adherence and
outcomes compared to IBT patients.",
    "Result 2": "Rising trend of heroin and opioid misuse in the U.S.",
    "Result 3": "Naltrexone's effectiveness limited by patient compliance
issues.",
    "Result 4": "Family involvement leads to better retention and
compliance.",
    "Result 5": "BFC results in positive long-term outcomes in substance
use and psychosocial functioning."
}
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```
paper_data13 = {
    "Title": "Cognitive-behavioral therapy and buprenorphine for opioid
use disorder: A systematic review and meta-analysis of randomized
controlled trials",
    "Year": 2020,
    "Journal": "The American Journal of Drug and Alcohol Abuse",
    "Main Methodology": "Systematic Review and Meta-Analysis",
    "Research Question": "Test the random effects model null hypothesis
for the summary effect of cognitive-behavioral therapy (CBT) +
buprenorphine randomized controlled trials (RCTs) in opioid use disorder
(OD)",
    "Policy Implication 1": "Focus on non-individual CBT modalities when
combined with buprenorphine for OUD.",
    "Policy Implication 2": "Re-evaluate the effectiveness of individual-
CBT in combination with buprenorphine.",
    "Policy Implication 3": "None",
    "Policy Implication 4": "None",
    "Policy Implication 5": "None",
    "Result 1": "Mixed effectiveness of CBT + buprenorphine treatments in
RCTs.",
    "Result 2": "Non-individual CBT shows significant benefits with
buprenorphine therapy.",
    "Result 3": "Individual-CBT does not demonstrate significant
benefits.",
    "Result 4": "Significant differences observed between individual and
non-individual CBT modalities.",
    "Result 5": "None"
}
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paper_data14 = {
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```
    "Title": "Cognitive Behavioral Therapy Improves Treatment Outcomes
for Prescription Opioid Users in Primary Care Buprenorphine Treatment",
    "Year": 2016,
    "Journal": "Journal of Substance Abuse Treatment",
    "Main Methodology": "Randomized Controlled Trial",
    "Research Question": "Effectiveness of CBT in improving treatment
outcomes for prescription opioid users in primary care buprenorphine
treatment",
    "Policy Implication 1": "Implement CBT for better abstinence outcomes
in prescription opioid users.",
    "Policy Implication 2": "Consider patient-specific opioid use types
when selecting treatment approaches.",
    "Policy Implication 3": "Prioritize CBT for patients with comorbid
substance use.",
    "Policy Implication 4": "Utilize a stepped-care approach with CBT for
non-responsive patients.",
    "Policy Implication 5": "Integrate automated behavioral interventions
for cost-effectiveness.",
    "Result 1": "CBT showed better outcomes for prescription opioid
users, not for heroin users.",
    "Result 2": "No significant differences in treatment retention based
on opioid type.",
    "Result 3": "Effect of CBT varies with the type of opioid used.",
    "Result 4": "CBT's effectiveness is moderate, highlighting cost-
effectiveness considerations.",
    "Result 5": "Treatment outcomes dependent on opioid use type."
}
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```
paper_data15 = {
    "Title": "Combined Pharmacotherapy and Cognitive Behavioral Therapy
for Adults With Alcohol or Substance Use Disorders",
    "Year": 2020,
    "Journal": "JAMA Network Open",
    "Main Methodology": "Systematic Review and Meta-Analysis",
    "Research Question": "Effects of combined CBT and pharmacotherapy for
adult alcohol use disorder (AUD) or other substance use disorders
(SUDs)",
    "Policy Implication 1": "Implement combined CBT and pharmacotherapy
for AUD and SUDs.",
    "Policy Implication 2": "Consider CBT as part of standard treatment
practices for addiction.",
    "Policy Implication 3": "Integrate evidence-based therapies alongside
pharmacotherapy.",
    "Policy Implication 4": "None",
    "Policy Implication 5": "None",
    "Result 1": "Positive impact of CBT with pharmacotherapy for AUD and
SUD.",
    "Result 2": "Alcohol, cocaine, and opioids were the primary
substances targeted.",
    "Result 3": "CBT did not outperform other modalities in combination
with pharmacotherapy.",
    "Result 4": "No unique benefit of CBT as an add-on to usual care and
pharmacotherapy.",
}
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```
    "Result 5": "None"
}
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```
paper_data16 = {
  "Title": "Community Opioid Treatment Perspectives on Contingency
Management: Perceived Feasibility Effectiveness and Transportability of
Social and Financial Incentives",
  "Year": 2013,
  "Journal": "Journal of Substance Abuse Treatment",
  "Main Methodology": "Mixed Method Study",
  "Research Question": "Perceptions of feasibility, effectiveness, and
transportability of social versus financial incentives in contingency
management (CM) for opioid treatment",
  "Policy Implication 1": "Prefer social incentives over financial ones
in contingency management.",
  "Policy Implication 2": "Address staff concerns about the cost and
patient dissatisfaction with financial incentives.",
  "Policy Implication 3": "Leverage social incentives' positive impact
on quality of life and treatment satisfaction.",
  "Policy Implication 4": "None",
  "Policy Implication 5": "None",
  "Result 1": "Social incentives seen as more feasible and effective
than financial ones.",
  "Result 2": "Perceived clinical effectiveness of social incentives
over financial ones.",
  "Result 3": "Negative perceptions of financial incentives in opioid
treatment.",
  "Result 4": "None",
  "Result 5": "None"
}
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```
paper_data17 = {
  "Title": "Comparative Effectiveness of Different Treatment Pathways
for Opioid Use Disorder",
  "Year": 2020,
  "Journal": "JAMA Network Open",
  "Main Methodology": "Retrospective Comparative Effectiveness
Research",
  "Research Question": "Associations between opioid use disorder (OUD)
treatment pathways and overdose and opioid-related acute care use",
  "Policy Implication 1": "Increase the use of buprenorphine or
methadone to reduce overdose risks.",
  "Policy Implication 2": "Develop strategies to address underuse of
medication for opioid use disorder (MOUD).",
  "Policy Implication 3": "None",
  "Policy Implication 4": "None",
  "Policy Implication 5": "None",
  "Result 1": "Majority receiving nonintensive behavioral health
treatment among individuals with OUD.",
  "Result 2": "Buprenorphine or methadone treatment associated with
reduced overdose risk.",
}
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    "Result 3": "Buprenorphine or methadone also effective in reducing
serious opioid-related acute care use.",
    "Result 4": "Buprenorphine or methadone treatment more effective than
other treatments in reducing overdose and acute care use.",
    "Result 5": "None"
}
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```
paper_data18 = {
  "Title": "Contingency Management for Treatment of Substance Use
Disorders: A Meta-Analysis",
  "Year": 2006,
  "Journal": "Addiction",
  "Main Methodology": "Meta-Analysis",
  "Research Question": "Effectiveness of contingency management (CM)
techniques in treating substance use disorders (illicit drugs, alcohol,
tobacco)",
  "Policy Implication 1": "Adopt CM techniques for effective treatment
of substance use disorders.",
  "Policy Implication 2": "None",
  "Policy Implication 3": "None",
  "Policy Implication 4": "None",
  "Policy Implication 5": "None",
  "Result 1": "Positive mean effect size of CM in treating substance
use disorders.",
  "Result 2": "CM more effective for opiate and cocaine use than for
tobacco or multiple drug use.",
  "Result 3": "Effectiveness of CM declines over time after
treatment.",
  "Result 4": "Larger effect sizes associated with high researcher
involvement and shorter treatment duration.",
  "Result 5": "CM among the more effective approaches for promoting
abstinence during treatment."
}
```

```
paper_data19 = {
  "Title": "Contingency Management Treatment for Substance Use
Disorders",
  "Year": 2017,
  "Journal": "Psychology of Addictive Behaviors",
  "Main Methodology": "Review",
  "Research Question": "Effectiveness and challenges of Contingency
Management in treating substance use disorders",
  "Policy Implication 1": "Implement CM interventions to improve
substance abuse treatment outcomes.",
  "Policy Implication 2": "None",
  "Policy Implication 3": "None",
  "Policy Implication 4": "None",
  "Policy Implication 5": "None",
  "Result 1": "Consistent improvement in treatment outcomes with CM
interventions.",
  "Result 2": "CM has a larger effect size compared to other
psychosocial treatments.",
}
```

```
    "Result 3": "CM effective for patients with criminal justice involvement and medical comorbidities.",
    "Result 4": "CM applicable in various contexts, such as methadone maintenance clinics.",
    "Result 5": "Benefits of CM noted even when controlling for therapist time."
}
```

```
paper_data20 = {
  "Title": "Cost and Utilization Outcomes of Opioid-Dependence Treatments",
  "Year": 2011,
  "Journal": "The American Journal of Managed Care",
  "Main Methodology": "Retrospective Claims Database Analysis",
  "Research Question": "Healthcare costs associated with treatment of opioid-dependence disorder with medications versus no medication and with the 4 agents approved by the US FDA",
  "Policy Implication 1": "Use medication for opioid dependence to reduce healthcare costs and inpatient admissions.",
  "Policy Implication 2": "None",
  "Policy Implication 3": "None",
  "Policy Implication 4": "None",
  "Policy Implication 5": "None",
  "Result 1": "Medication associated with fewer inpatient admissions and lower total healthcare costs.",
  "Result 2": "XR-NTX patients had fewer hospitalizations and similar healthcare costs compared to other treatments.",
  "Result 3": "XR-NTX cohort characteristics indicate prescribing bias.",
  "Result 4": "XR-NTX patients spent more days in detox and had fewer psychiatric medications.",
  "Result 5": "XR-NTX associated with fewer opioid-related inpatient admissions."
}
```

```
paper_data21 = {
  "Title": "Cost-effectiveness of Treatments for Opioid Use Disorder",
  "Year": 2021,
  "Journal": "JAMA Psychiatry",
  "Main Methodology": "Model-based Cost-effectiveness Analysis",
  "Research Question": "Cost-effectiveness of MAT combined with OEND and CM in reducing morbidity and mortality from OUD",
  "Policy Implication 1": "Promote MAT with CM and psychotherapy for cost-effective treatment.",
  "Policy Implication 2": "Include criminal justice costs in evaluating MAT cost-effectiveness.",
  "Policy Implication 3": "Prioritize methadone plus CM for largest cost savings.",
  "Policy Implication 4": "Consider adding OEND to existing MAT programs for additional benefits.",
  "Policy Implication 5": "None",
}
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```
    "Result 1": "Substantial overdose and death reduction with MAT and
additional interventions.",
    "Result 2": "Significant QALYs gains with MAT.",
    "Result 3": "Health care and criminal justice cost analysis favors
MAT.",
    "Result 4": "Cost-effectiveness varies among different MAT
interventions.",
    "Result 5": "CM and OEND additions enhance cost-effectiveness of
MAT."
}
```

```
paper_data22 = {
  "Title": "Dissemination of Contingency Management for the Treatment
of Opioid Use Disorder",
  "Year": 2023,
  "Journal": "Perspectives on Behavior Science",
  "Main Methodology": "Review",
  "Research Question": "How can the dissemination of Contingency
Management for opioid use disorder be improved?",
  "Policy Implication 1": "Increase availability and adoption of CM in
outpatient clinics.",
  "Policy Implication 2": "Overcome CM dissemination barriers like
expertise and financial resources.",
  "Policy Implication 3": "Introduce incentivized collaborative care to
enhance CM access.",
  "Policy Implication 4": "Implement financial incentives for providers
based on performance.",
  "Policy Implication 5": "None",
  "Result 1": "CM's broad effectiveness across various contexts.",
  "Result 2": "CM's particular effectiveness in opioid use disorder
when combined with medication-assisted treatment.",
  "Result 3": "Barriers to CM dissemination in outpatient substance
abuse treatment clinics.",
  "Result 4": "Cost as a major barrier to CM adoption in outpatient
treatment providers.",
  "Result 5": "None"
}
```

```
paper_data23 = {
  "Title": "Early Adoption of Buprenorphine in Substance Abuse
Treatment Centers: Data from the private and public sectors",
  "Year": 2006,
  "Journal": "Journal of Substance Abuse Treatment",
  "Main Methodology": "Data Analysis from National Samples",
  "Research Question": "What are the organizational characteristics
associated with the early adoption of buprenorphine in substance abuse
treatment centers?",
  "Policy Implication 1": "Encourage private funding for early adoption
of new treatments like buprenorphine.",
  "Policy Implication 2": "Support larger centers and hospital-based
programs in adopting new treatments.",
}
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"Policy Implication 3": "Facilitate buprenorphine adoption in centers with detoxification services.",
"Policy Implication 4": "Promote buprenorphine in centers with existing naltrexone use.",
"Policy Implication 5": "None",
"Result 1": "Association between center size and early adoption of buprenorphine.",
"Result 2": "Higher likelihood of adopting buprenorphine in centers with access to physician services.",
"Result 3": "Centers with a higher percentage of opiate clients more likely to use buprenorphine.",
"Result 4": "No significant association with the year of interview or the percentage of master's-level counselors.",
"Result 5": "12-step based centers more likely to adopt buprenorphine early."
}
```

```
paper_data24 = {
  "Title": "Effectiveness of Bystander Naloxone Administration and Overdose Education Programs: A Meta-Analysis",
  "Year": 2015,
  "Journal": "Injury Epidemiology",
  "Main Methodology": "Meta-Analysis",
  "Research Question": "Effectiveness of bystander naloxone administration and overdose education programs",
  "Policy Implication 1": "Promote bystander naloxone administration as an effective overdose response.",
  "Policy Implication 2": "Enhance overdose education among the general public.",
  "Policy Implication 3": "None",
  "Policy Implication 4": "None",
  "Policy Implication 5": "None",
  "Result 1": "Significant increase in recovery odds with naloxone administration by bystanders.",
  "Result 2": "Trained participants show better knowledge in naloxone administration and overdose response.",
  "Result 3": "Improved overdose recognition and management knowledge among trained non-medical volunteers.",
  "Result 4": "None",
  "Result 5": "None"
}
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```
paper_data25 = {
  "Title": "Evidence-Based Psychosocial Treatments for Adolescent Substance Abuse",
  "Year": 2008,
  "Journal": "Journal of Clinical Child & Adolescent Psychology",
  "Main Methodology": "Meta-Analysis",
  "Research Question": "Evaluation of outpatient treatments for adolescent substance abuse",
}
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    "Policy Implication 1": "Focus on well-established models like multidimensional family therapy, functional family therapy, and group CBT.",
    "Policy Implication 2": "None",
    "Policy Implication 3": "None",
    "Policy Implication 4": "None",
    "Policy Implication 5": "None",
    "Result 1": "Synthesis of findings on outpatient adolescent substance abuse treatments.",
    "Result 2": "Analysis of various intervention conditions across a diverse adolescent sample.",
    "Result 3": "Evaluation of treatment effectiveness across different modalities.",
    "Result 4": "None",
    "Result 5": "None"
}

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paper_data26 = {
    "Title": "Evidence-based treatment for opioid use disorders: A national study of methadone dose levels 2011-2017",
    "Year": 2019,
    "Journal": "Journal of Substance Abuse Treatment",
    "Main Methodology": "National Study",
    "Research Question": "Extent to which the nation's MMT programs meet evidence-based standards for methadone dose level and characteristics associated with variation in performance",
    "Policy Implication 1": "Need for more stringent regulation and oversight in private for-profit and public MMT organizations to address under-dosing.",
    "Policy Implication 2": "Strategies to mitigate racial disparities in methadone dosing, especially for African-American patients.",
    "Policy Implication 3": "Critical review of managed care policies to ensure they align with evidence-based dosing standards.",
    "Policy Implication 4": "Monitoring the rising market trend of for-profit MMT programs for compliance with treatment standards.",
    "Policy Implication 5": "None",
    "Result 1": "Almost half of MMT patients received suboptimal doses, highlighting a need for adherence to dosing standards.",
    "Result 2": "Regional differences in dosing practices suggest the need for uniform national guidelines.",
    "Result 3": "Prevalence of low dosing in programs primarily serving African-American patients indicates potential racial bias in treatment.",
    "Result 4": "Emphasizing the importance of maintaining minimum dosing standards for effective MMT.",
    "Result 5": "None"
}

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paper_data27 = {
    "Title": "Evidence-based treatment for opioid disorders: A 23-year national study of methadone dose levels",

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    "Year": "Post-2011",
    "Journal": "Journal Name Not Provided",
    "Main Methodology": "National Survey of Methadone Treatment
Programs",
    "Research Question": "Assessment of U.S. MMT programs against
evidence-based standards for patient care with a focus on methadone dose
levels",
    "Policy Implication 1": "Addressing racial and ethnic disparities in
methadone dosing in treatment programs.",
    "Policy Implication 2": "Encouraging JCAHO accreditation in MMT
programs to ensure higher dosing standards.",
    "Policy Implication 3": "Promoting aggressive HIV prevention policies
in MMT programs to support higher dosing levels.",
    "Policy Implication 4": "None",
    "Policy Implication 5": "None",
    "Result 1": "Significant reduction in patients receiving suboptimal
methadone doses over 23 years.",
    "Result 2": "Increase in programs offering effective doses,
indicating improvement in treatment quality.",
    "Result 3": "Correlation between higher unemployment rates and higher
methadone doses requires further exploration.",
    "Result 4": "Tendency to provide higher doses to older patient
groups, suggesting age-based treatment adjustments.",
    "Result 5": "Regional variation in dosing levels points to the need
for standardized dosing guidelines across different areas."
}

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paper_data28 = {
    "Title": "Evidence-Based Treatment of Opioid-Dependent Patients",
    "Year": 2006,
    "Journal": "Canadian Journal of Psychiatry",
    "Main Methodology": "Review of published studies, systematic
literature reviews, meta-analyses, and recent trials",
    "Research Question": "Overview of treatment options for opioid-
dependent patients",
    "Policy Implication 1": "Recommendation for the widespread
availability of agonist maintenance treatment and psychosocial support.",
    "Policy Implication 2": "Utilization of prison sentences as
opportunities for offering maintenance treatment and rehabilitation.",
    "Policy Implication 3": "None",
    "Policy Implication 4": "None",
    "Policy Implication 5": "None",
    "Result 1": "Recognition of opioid dependence as a chronic relapsing
disorder with diverse treatment goals.",
    "Result 2": "Promising potential of new extended-release antagonist
treatments for stable, motivated patients.",
    "Result 3": "Need for more research on prescription opioids and newer
treatment methods.",
    "Result 4": "Lack of extensive research on many prison-based and
harm-reduction interventions.",
    "Result 5": "None"
}

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paper_data29 = {
  "Title": "Impact of Medication-Assisted Treatment for Opioid
Addiction on Medicaid Expenditures and Health Services Utilization Rates
in Vermont",
  "Year": 2016,
  "Journal": "Journal of Substance Abuse Treatment",
  "Main Methodology": "Serial cross-sectional design using medical
claims data",
  "Research Question": "Assess the impact of MAT on health care
expenditures and utilization rates in Vermont",
  "Policy Implication 1": "Promoting MAT as a cost-effective approach
for reducing general health care expenditures.",
  "Policy Implication 2": "Addressing methodological limitations in MAT
cost analysis for better policy formulation.",
  "Policy Implication 3": "None",
  "Policy Implication 4": "None",
  "Policy Implication 5": "None",
  "Result 1": "MAT's effectiveness in reducing opiate abuse, compared
to time-limited medication or psychosocial interventions.",
  "Result 2": "Lower overall health care costs with MAT, excluding
opioid addiction treatment expenses.",
  "Result 3": "None",
  "Result 4": "None",
  "Result 5": "None"
}

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paper_data30 = {
  "Title": "Implementing buprenorphine in addiction treatment: payer
and provider perspectives in Ohio",
  "Year": 2015,
  "Journal": "Substance Abuse Treatment Prevention and Policy",
  "Main Methodology": "Qualitative interviews with ADAMHS Boards and
addiction treatment centers",
  "Research Question": "Examine barriers and facilitators to
buprenorphine use in Ohio",
  "Policy Implication 1": "Address slow adoption of buprenorphine in
publicly-funded centers through targeted awareness and training.",
  "Policy Implication 2": "Overcome negative attitudes towards
pharmacotherapy by promoting evidence-based practices.",
  "Policy Implication 3": "Enhance physician capacity and willingness
to prescribe buprenorphine.",
  "Policy Implication 4": "Ensure adequate funding, including Medicaid
reimbursement, for buprenorphine therapy.",
  "Policy Implication 5": "Navigate the preference for behavioral
approaches by integrating buprenorphine into holistic treatment plans.",
  "Result 1": "Varied adoption rates across Ohio, influenced by funding
and provider attitudes.",
  "Result 2": "Criminal justice support and funding availability are
key facilitators for buprenorphine adoption.",
  "Result 3": "Patient caps under DATA 2000 limit physician capacity,
hindering buprenorphine use.",
  "Result 4": "None",
  "Result 5": "None"
}

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}
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```
paper_data31 = {  
  "Title": "Improving Access to Evidence-Based Medical Treatment for  
Opioid Use Disorder",  
  "Year": 2020,  
  "Journal": "Not Specified in the Quoted Text",  
  "Main Methodology": "Analysis of barriers and strategies to increase  
access to medical treatment for OUD",  
  "Research Question": "Identifying strategies to increase access to  
effective medical treatment for OUD and addressing barriers to MOUD",  
  "Policy Implication 1": "Implementing training programs to reduce  
clinician stigma and improve care for patients with OUD.",  
  "Policy Implication 2": "Increasing the number of addiction treatment  
specialists to meet patient needs.",  
  "Policy Implication 3": "Standardizing the provision of medications  
for OUD in medical and psychiatric care.",  
  "Policy Implication 4": "Revising laws and regulations that limit  
access to addiction treatment.",  
  "Policy Implication 5": "Addressing financial barriers to make  
treatment more accessible.",  
  "Result 1": "Majority of Americans with OUD are not receiving  
treatment, highlighting a critical gap in care.",  
  "Result 2": "Stigmatizing attitudes and lack of adequate training  
among clinicians hinder effective treatment.",  
  "Result 3": "Challenges in data sharing and care coordination impede  
quality care.",  
  "Result 4": "Lack of focus on patient-centered care systems in  
treatment strategies.",  
  "Result 5": "Insufficient research on why many people who use drugs  
are not engaged in treatment."  
}
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paper_data32 = {  
  "Title": "Low-Cost Contingency Management for Treating Cocaine- and  
Opioid-Abusing Methadone Patients",  
  "Year": 2002,  
  "Journal": "Journal of Consulting and Clinical Psychology",  
  "Main Methodology": "Evaluation of low-cost contingency management in  
reducing drug use",  
  "Research Question": "Effectiveness of a low-cost contingency  
management procedure in reducing cocaine and opioid use",  
  "Policy Implication 1": "Implementing low-cost contingency management  
approaches as a viable option in addiction treatment settings.",  
  "Policy Implication 2": "Addressing the public health concern of  
cocaine use with cost-effective interventions.",  
  "Policy Implication 3": "None",  
  "Policy Implication 4": "None",  
  "Policy Implication 5": "None",  
  "Result 1": "Effective reduction of concurrent cocaine and opioid use  
among methadone patients with low-cost contingency management.",  
}
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    "Result 2": "Demonstration of the potential of prize reinforcement as a lower-cost alternative to voucher-based systems.",
    "Result 3": "None",
    "Result 4": "None",
    "Result 5": "None"
}
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paper_data33 = {
  "Title": "Medication-Assisted Treatment With Methadone: Assessing the Evidence",
  "Year": 2014,
  "Journal": "Not Specified in the Quoted Text",
  "Main Methodology": "Review of meta-analyses, systematic reviews, and individual studies of MMT from 1995 through 2012",
  "Research Question": "Examination of evidence for MMT's effectiveness in treating opioid use disorder",
  "Policy Implication 1": "Strengthening MMT programs as a viable alternative to detoxification for opioid use disorder.",
  "Policy Implication 2": "Addressing the public health concerns of opioid dependence through effective pharmacotherapy.",
  "Policy Implication 3": "Integrating behavioral therapies with MMT to enhance treatment outcomes.",
  "Policy Implication 4": "None",
  "Policy Implication 5": "None",
  "Result 1": "MMT shown to be effective in decreasing illegal or nonmedical opioid use.",
  "Result 2": "MMT's effectiveness in addressing risks associated with opioid dependence.",
  "Result 3": "None",
  "Result 4": "None",
  "Result 5": "None"
}
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paper_data34 = {
  "Title": "Medication-Assisted Treatment With Buprenorphine: Assessing the Evidence",
  "Year": 2014,
  "Journal": "Not Specified in the Quoted Text",
  "Main Methodology": "Review of meta-analyses, systematic reviews, and individual studies of BMT from 1995 through 2012",
  "Research Question": "Effectiveness of BMT in treating opioid use disorders",
  "Policy Implication 1": "Promoting BMT alongside MMT as primary pharmacological treatments for opioid use disorders.",
  "Policy Implication 2": "Implementing high-dose sublingual formulations of buprenorphine to treat opioid dependence.",
  "Policy Implication 3": "Expanding research and policy focus on prescription opioid dependence.",
  "Policy Implication 4": "Combining pharmacotherapy with behavioral therapies for a comprehensive approach to opioid use disorders.",
  "Policy Implication 5": "None",
  "Result 1": "BMT found effective in decreasing illicit opioid use.",
  "Result 2": "BMT associated with improved outcomes in treating opioid use disorders.",
}
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"Result 3": "None",
"Result 4": "None",
"Result 5": "None"
}
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```
paper_data35 = {
  "Title": "Medication-Assisted Treatment Improves Child Permanency
Outcomes for Opioid-Using Families in the Child Welfare System",
  "Year": 2016,
  "Journal": "Journal of Substance Abuse Treatment",
  "Main Methodology": "Study on MAT utilization and child permanency
outcomes in the START program",
  "Research Question": "Effectiveness of MAT in improving child custody
outcomes among opioid-using parents in the child welfare system",
  "Policy Implication 1": "Prioritizing MAT for opioid-using parents in
the child welfare system to improve family reunification rates.",
  "Policy Implication 2": "Addressing underutilization of MAT due to
systemic barriers and stigmatization.",
  "Policy Implication 3": "Ensuring equitable access to MAT across
different demographic groups.",
  "Policy Implication 4": "Integrating MAT into a comprehensive child
welfare approach to support opioid-using parents.",
  "Policy Implication 5": "None",
  "Result 1": "MAT use positively associated with retaining custody of
children for opioid-using parents.",
  "Result 2": "Low reunification rates for parents with opioid use
compared to alcohol or cocaine use.",
  "Result 3": "Only a small percentage of opioid users in the START
program received MAT.",
  "Result 4": "None",
  "Result 5": "None"
}
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paper_data36 = {
  "Title": "National and State Treatment Need and Capacity for Opioid
Agonist Medication-Assisted Treatment",
  "Year": 2015,
  "Journal": "American Journal of Public Health",
  "Main Methodology": "Analysis of national and state trends in opioid
agonist medication-assisted treatment need and capacity",
  "Research Question": "Identification of gaps in opioid agonist
medication-assisted treatment need and capacity",
  "Policy Implication 1": "Enhancing access to MAT in the child welfare
system to improve family reunification outcomes.",
  "Policy Implication 2": "Addressing underutilization of MAT through
policy changes and increased physician training.",
  "Policy Implication 3": "Reducing stigmatization of MAT to improve
integration with other health care services.",
  "Policy Implication 4": "Promoting equitable access to MAT across
different demographic groups.",
  "Policy Implication 5": "Increasing awareness and support for MAT
among child welfare stakeholders.",
}
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"Result 1": "Association of MAT duration with increased likelihood of
parents retaining custody.",
"Result 2": "Low rates of MAT utilization among opioid-using parents
in the child welfare system.",
"Result 3": "Lower reunification rates for parents with opioid use
compared to other substances.",
"Result 4": "Recognition of MAT as the most effective treatment for
opioid use disorders.",
"Result 5": "Demographic disparities in receiving MAT, with White
individuals more likely to receive it."
}
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```
paper_data37 = {
  "Title": "Opioid Agonist Treatments and Heroin Overdose Deaths in
Baltimore, Maryland 1995-2009",
  "Year": 2013,
  "Journal": "American Journal of Public Health",
  "Main Methodology": "Longitudinal time series analysis of archival
data using linear regression",
  "Research Question": "Association between the expansion of methadone
and buprenorphine treatment and heroin overdose deaths",
  "Policy Implication 1": "Expanding opioid agonist treatment as a
strategy to decrease heroin overdose deaths.",
  "Policy Implication 2": "Leveraging buprenorphine treatment to reduce
heroin overdose rates.",
  "Policy Implication 3": "Evaluating the impact of methadone treatment
expansion on heroin overdose deaths.",
  "Policy Implication 4": "Assessing the role of opioid agonist
treatment in national drug policy.",
  "Policy Implication 5": "Consideration of heroin purity trends in
evaluating treatment effectiveness.",
  "Result 1": "Inverse relationship between heroin overdose deaths and
buprenorphine treatment.",
  "Result 2": "Decrease in heroin overdose deaths linked to expansion
of opioid agonist treatment.",
  "Result 3": "Negative association between methadone patients and
heroin overdose deaths from 2003 onwards.",
  "Result 4": "Increase in methadone-associated deaths, peaking in
2007.",
  "Result 5": "Potential for reducing heroin overdose deaths through
medication treatment policies."
}
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```
paper_data38 = {
  "Title": "Patients' Beliefs About Medications are Associated with
Stated Preference for Methadone Buprenorphine Naltrexone or no
Medication-Assisted Therapy Following Inpatient Opioid Detoxification",
  "Year": 2016,
  "Journal": "Journal of Substance Abuse Treatment",
  "Main Methodology": "Survey analysis of patients undergoing inpatient
opioid detoxification",
}
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"Research Question": "How do patients' beliefs about medications
relate to their preferences for medication-assisted therapy post-
detoxification?",
  "Policy Implication 1": "Tailoring medication-assisted therapy to
individual beliefs and preferences post-detoxification.",
  "Policy Implication 2": "Addressing misconceptions and negative
beliefs about MAT to improve patient acceptance.",
  "Policy Implication 3": "Considering structural barriers in MAT
choices, particularly regarding MMT.",
  "Policy Implication 4": "Promoting awareness of the efficacy and
safety of various MAT options.",
  "Policy Implication 5": "Understanding patient preferences for novel
treatments like XR-NTX for informed policy making.",
  "Result 1": "Correlation between patients' beliefs about efficacy,
safety, and drug-freeness with MAT preferences.",
  "Result 2": "Preference for no MAT linked to negative beliefs about
all forms of MAT.",
  "Result 3": "Buprenorphine and XR-NTX perceived as more effective and
safe than methadone.",
  "Result 4": "High interest in XR-NTX, influenced by its novelty and
convenience.",
  "Result 5": "Confidence among participants in starting their
preferred medication post-detoxification."
}

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```

paper_data39 = {
  "Title": "Payer Policy Behavior Towards Opioid Pharmacotherapy
Treatment in Ohio",
  "Year": 2018,
  "Journal": "Journal of Addiction Medicine",
  "Main Methodology": "Survey of 52 Ohio ADAMHS Boards and analysis of
public health data",
  "Research Question": "How do Ohio's ADAMHS Boards cover opioid
agonist and antagonist treatment medications?",
  "Policy Implication 1": "Increasing coverage of opioid treatment
medications by ADAMHS Boards.",
  "Policy Implication 2": "Mandating behavioral therapy in conjunction
with opioid agonist or antagonist therapy.",
  "Policy Implication 3": "Reconsidering limitations on the length of
buprenorphine therapy regimens.",
  "Policy Implication 4": "Correlating local opioid treatment admission
rates with Board funding.",
  "Policy Implication 5": "Assessing the impact of overdose fatality
rates on policy decisions.",
  "Result 1": "70% of participating ADAMHS Boards funded opioid
treatment medications.",
  "Result 2": "27% of Boards imposed duration limits on buprenorphine
therapy.",
  "Result 3": "No direct correlation found between overdose fatality
rates and ADAMHS support.",
  "Result 4": "Study highlights diverse policy behaviors of payers
towards opioid treatment.",
}

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```
"Result 5": "30% of ADAMHS Boards did not cover medications for
opioid treatment."
}
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paper_data40 = {
  "Title": "Primary Care-Based Models for the Treatment of Opioid Use
Disorder: A Scoping Review",
  "Year": 2017,
  "Journal": "Annals of Internal Medicine",
  "Main Methodology": "Scoping review of literature and interviews with
key informants",
  "Research Question": "What are the various models for integrating MAT
into primary care, and what are their key components and outcomes?",
  "Policy Implication 1": "Promoting the integration of MAT into
primary care through diverse models.",
  "Policy Implication 2": "Ensuring pharmacotherapy and psychosocial
services are key components in treatment models.",
  "Policy Implication 3": "Highlighting the role of nonphysician
coordinators in MAT models.",
  "Policy Implication 4": "Adapting model choice to local factors like
expertise, population, and geography.",
  "Policy Implication 5": "Addressing barriers to MAT implementation
including provider training and reimbursement models.",
  "Result 1": "Identification of 12 primary care-based MAT models.",
  "Result 2": "Variation in model emphasis on different treatment
components.",
  "Result 3": "Ten of the 12 models offered sublingual buprenorphine-
naltrexone pharmacotherapy.",
  "Result 4": "Strategies for overcoming MAT implementation barriers.",
  "Result 5": "Need for research in areas like quality assessment and
telehealth approaches."
}
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```
paper_data41 = {
  "Title": "State policy influence on the early diffusion of
buprenorphine in community treatment programs",
  "Year": 2008,
  "Journal": "Substance Abuse Treatment Prevention and Policy",
  "Main Methodology": "Interviews with key informants from 49 state
agencies and data integration from the 2006 National Survey of Substance
Abuse Treatment Services, analyzed using a multivariate logistic
regression model",
  "Research Question": "Impact of state agency efforts, including
Medicaid coverage, on the adoption of buprenorphine in community
treatment programs as of 2006",
  "Policy Implication 1": "Enhancing Medicaid coverage for
buprenorphine to increase its adoption.",
  "Policy Implication 2": "Encouraging proactive state policies for
inclusion of buprenorphine in Medicaid formularies.",
  "Policy Implication 3": "Focusing on targeted policy changes to
facilitate pharmacotherapies for addiction treatment.",
  "Policy Implication 4": "Exploring the differential adoption of
buprenorphine in public and private sectors.",
}
```

```
    "Policy Implication 5": "Updating research to reflect current
policies and practices in opioid treatment.",
    "Result 1": "Significant prediction of buprenorphine adoption by
Medicaid coverage.",
    "Result 2": "Early adopters of buprenorphine were typically OTPs and
facilities with inpatient services.",
    "Result 3": "Lack of influence of general state agency orientation
towards buprenorphine on program-level adoption.",
    "Result 4": "Lower adoption rates of buprenorphine in public sector
programs.",
    "Result 5": "Snapshot of evolving opioid treatment policies as of
2006."
}
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paper_data42 = {
    "Title": "State-Targeted Funding and Technical Assistance to Increase
Access to Medication Treatment for Opioid Use Disorder",
    "Year": 2018,
    "Journal": "Psychiatric Services",
    "Main Methodology": "Data from the 2013-2014 National Drug Abuse
Treatment System Survey, logistic regression analysis",
    "Research Question": "Impact of state-targeted funding and technical
assistance on the adoption of medications for opioid use disorder",
    "Policy Implication 1": "Enhancing state-targeted funding to increase
the adoption of opioid treatment medications.",
    "Policy Implication 2": "Providing state-based technical assistance
to support treatment programs.",
    "Policy Implication 3": "Utilizing block grant funding effectively
for various opioid treatment medications.",
    "Policy Implication 4": "Recognizing the crucial role of state
substance abuse agencies in resource allocation.",
    "Policy Implication 5": "Evaluating the impact of state interventions
on medication access.",
    "Result 1": "Increased adoption of oral naltrexone and buprenorphine
associated with state-targeted funding.",
    "Result 2": "State funding and technical assistance positively
influenced buprenorphine adoption.",
    "Result 3": "Substance abuse agencies played a key role in funding
allocation.",
    "Result 4": "Most agencies offered technical support for medication
adoption.",
    "Result 5": "Highlighting the importance of targeted state-level
interventions."
}
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```
paper_data43 = {
    "Title": "Targeting Behavioral Therapies to Enhance Naltrexone
Treatment of Opioid Dependence: Efficacy of Contingency Management and
Significant Other Involvement",
    "Year": 2001,
    "Journal": "Arch Gen Psychiatry",
    "Main Methodology": "Randomized assignment of 127 detoxified opioid-
dependent individuals to three treatment conditions over 12 weeks",
}
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"Research Question": "Evaluating the effectiveness of contingency management and significant other involvement in enhancing naltrexone treatment of opioid dependence",
  "Policy Implication 1": "Incorporating contingency management to improve treatment retention and reduce opioid use.",
  "Policy Implication 2": "Evaluating the role of significant other involvement in treatment outcomes.",
  "Policy Implication 3": "Highlighting the importance of family counseling sessions in enhancing treatment efficacy.",
  "Policy Implication 4": "Improving family functioning as a component of opioid dependence treatment.",
  "Policy Implication 5": "Balancing pharmacotherapy with targeted behavioral interventions.",
  "Result 1": "Contingency management significantly improved treatment outcomes.",
  "Result 2": "Limited effectiveness of significant other involvement without family counseling.",
  "Result 3": "Family counseling improved outcomes in specific subgroups.",
  "Result 4": "Positive impact of significant other involvement on family dynamics.",
  "Result 5": "Demonstrating the complementarity of behavioral therapies and pharmacotherapy."
}
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```
paper_data44 = {
  "Title": "The cost-effectiveness of prize-based and voucher-based contingency management in a population of cocaine- or opioid-dependent outpatients",
  "Year": 2009,
  "Journal": "Drug and Alcohol Dependence",
  "Main Methodology": "Cost-effectiveness analysis based on a randomized clinical trial with prize and voucher contingency management (CM) coupled with standard treatment",
  "Research Question": "Evaluate the cost-effectiveness of prize-based and voucher-based contingency management in addition to standard treatment for cocaine- or heroin-dependent outpatients",
  "Policy Implication 1": "Assessing the cost-effectiveness of different contingency management approaches.",
  "Policy Implication 2": "Considering the value of improved patient outcomes in cost-effectiveness analysis.",
  "Policy Implication 3": "Exploring ways to reduce implementation costs of contingency management.",
  "Policy Implication 4": "Informing policy decisions on drug use treatment and related crime.",
  "Policy Implication 5": "Investigating the economic aspects of behavioral interventions.",
  "Result 1": "Prize and voucher CM improved patient outcomes but increased treatment costs.",
  "Result 2": "The value assigned to treatment outcomes influenced cost-effectiveness.",
}
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    "Result 3": "Significant portion of costs associated with CM
implementation.",
    "Result 4": "Study provides insights for policy-making in addiction
treatment.",
    "Result 5": "Need for research on cost reduction strategies in CM."
}
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```
paper_data45 = {
    "Title": "The Effect of Public Insurance Expansions on Substance Use
Disorder Treatment: Evidence from the Affordable Care Act",
    "Year": 2019,
    "Journal": "Journal of Policy Analysis and Management",
    "Main Methodology": "Event-study design, combining data on admissions
to specialty facilities and Medicaid-reimbursed prescriptions for SUDs in
nonspecialty outpatient settings",
    "Research Question": "Examine the effect of Medicaid expansion under
the ACA on SUD treatment utilization and financing",
    "Policy Implication 1": "Enhancing Medicaid coverage to increase
access to specialty SUD care.",
    "Policy Implication 2": "Reducing the financial burden on state and
local governments for SUD treatment.",
    "Policy Implication 3": "Incorporating private insurance for a more
balanced treatment payment structure.",
    "Policy Implication 4": "Expanding Medicaid prescription coverage for
SUD medications.",
    "Policy Implication 5": "Assessing the broader fiscal implications of
Medicaid expansion on SUD treatment.",
    "Result 1": "Post-expansion, Medicaid coverage and payments in
specialty care increased.",
    "Result 2": "Decrease in uninsured patients and reliance on
state/local government payments.",
    "Result 3": "Increase in private insurance coverage and payments for
SUD treatment.",
    "Result 4": "Growth in Medicaid-reimbursed SUD medication
prescriptions.",
    "Result 5": "Possible increase in admissions to specialty treatment
in expansion states."
}
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```
paper_data46 = {
    "Title": "The Efficacy of Cognitive Behavioral Therapy: A Review of
Meta-analyses",
    "Year": 2012,
    "Journal": "Cognitive Therapy and Research",
    "Main Methodology": "Comprehensive survey of 269 meta-analytic
studies examining the efficacy of CBT across a variety of problems",
    "Research Question": "To provide a comprehensive overview of the
efficacy of Cognitive Behavioral Therapy (CBT) for various psychological
problems",
    "Policy Implication 1": "Prioritizing CBT for treating anxiety,
somatoform disorders, bulimia, anger control, and stress.",
}
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"Policy Implication 2": "Evaluating the use of CBT for depression and
schizophrenia.",
"Policy Implication 3": "Assessing the effectiveness of CBT for
specific somatoform disorders.",
"Policy Implication 4": "Implementing CBT for insomnia and chronic
pain management.",
"Policy Implication 5": "Considering CBT for personality disorders
and child/adolescent internalizing disorders.",
"Result 1": "Strong evidence supporting CBT's effectiveness in
various disorders.",
"Result 2": "Higher response rates of CBT compared to other
treatments.",
"Result 3": "Beneficial effects of CBT in treating schizophrenia as
an adjunct to pharmacotherapy.",
"Result 4": "Large effect sizes of CBT for specific somatoform
disorders.",
"Result 5": "Evidence of CBT's efficacy for bulimia nervosa and
insomnia."
}
```

```
paper_data47 = {
  "Title": "The Role of Behavioral Interventions in Buprenorphine
Maintenance Treatment: A Review",
  "Year": 2017,
  "Journal": "American Journal of Psychiatry",
  "Main Methodology": "Review of randomized controlled studies testing
the efficacy of adding a behavioral intervention to buprenorphine
maintenance treatment",
  "Research Question": "What is the role, nature, and intensity of
behavioral interventions in office-based buprenorphine treatment for
opioid use disorders?",
  "Policy Implication 1": "Reevaluating the necessity of additional
behavioral interventions in buprenorphine treatment.",
  "Policy Implication 2": "Considering contingency management as a
specific beneficial behavioral intervention.",
  "Policy Implication 3": "Implementing a stepped-care model for
treatment intensity adjustment.",
  "Policy Implication 4": "Developing strategies to enhance retention
in buprenorphine treatment.",
  "Policy Implication 5": "Assessing patient profiles to determine the
sufficiency of medical management alone.",
  "Result 1": "Mixed evidence on the benefit of adding behavioral
interventions to buprenorphine.",
  "Result 2": "Some studies indicate benefits from specific behavioral
interventions.",
  "Result 3": "High-quality medical management might be sufficient for
some patients.",
  "Result 4": "Retention rates in buprenorphine treatment remain a
challenge.",
  "Result 5": "Efficacy of stepped-care approaches in opioid use
disorder treatment."
}
```

```
paper_data48 = {
  "Title": "The Role of Health Insurance on Treatment for Opioid Use Disorders: Evidence from the Affordable Care Act Medicaid Expansion",
  "Year": 2018,
  "Journal": "Journal of Health Economics",
  "Main Methodology": "Difference-in-differences design using administrative data from 2007 to 2016, focusing on opioid use disorder (OUD) treatment utilization, availability, and opioid agonist MAT availability",
  "Research Question": "Effect of health insurance coverage on opioid use disorder treatment utilization and availability following Medicaid expansions under the Affordable Care Act",
  "Policy Implication 1": "Expanding Medicaid increases access to specialty OUD treatment facilities.",
  "Policy Implication 2": "Encouraging market entry of MAT providers and greater Medicaid acceptance.",
  "Policy Implication 3": "Strengthening MAT coverage in Medicaid expansion states.",
  "Policy Implication 4": "Improving buprenorphine availability through increased capacity of DATA2000-licensed physicians.",
  "Policy Implication 5": "Balancing the increase in Medicaid beneficiaries with maintaining services for insured individuals",
  "Result 1": "18% increase in opioid admissions to specialty treatment facilities in expansion states.",
  "Result 2": "113% increase in opioid admissions from Medicaid beneficiaries.",
  "Result 3": "Largest effects observed in states with comprehensive MAT coverage.",
  "Result 4": "Two-thirds of the increase in admissions from Medicaid beneficiaries resulted in utilization gains.",
  "Result 5": "17% increase in capacity of DATA2000-licensed physicians."
}
```

```
paper_data49 = {
  "Title": "Utilization and outcomes of detoxification and maintenance treatment for opioid dependence in publicly-funded facilities in California USA: 1991-2012",
  "Year": 2014,
  "Journal": "Drug and Alcohol Dependence",
  "Main Methodology": "State-wide administrative data analysis, mixed effects regression models to define determinants of successful detoxification and maintenance treatment duration",
  "Research Question": "Characterize changes in patient characteristics and treatment utilization over time and identify determinants of successful detoxification and maintenance treatment (MMT) retention in repeated attempts",
  "Policy Implication 1": "Adjusting strategies for repeated detoxification attempts based on decreasing odds of success.",
  "Policy Implication 2": "Increasing focus on maintenance treatment, given its increasing duration in subsequent attempts.",
  "Policy Implication 3": "Addressing the complex drug use patterns among patients in detoxification and maintenance treatments.",
}
```

```
"Policy Implication 4": "Enhancing employment and criminal justice support for patients in treatment.",
"Policy Implication 5": "Evaluating treatment length and frequency to optimize outcomes.",
"Result 1": "Decrease in detoxification treatment episodes over time.",
"Result 2": "Success rates in detoxification decline with each successive attempt.",
"Result 3": "No significant difference in time to re-entry between successful and unsuccessful detoxifications.",
"Result 4": "Daily primary drug use most common among patients.",
"Result 5": "Majority of patients unemployed or out of the labor force."
}
```

```
paper_data50 = {
  "Title": "Where Is Buprenorphine Dispensed to Treat Opioid Use Disorders? The Role of Private Offices, Opioid Treatment Programs, and Substance Abuse Treatment Facilities in Urban and Rural Counties",
  "Year": 2015,
  "Journal": "The Milbank Quarterly",
  "Main Methodology": "Analysis of 2004-2011 state-level data on buprenorphine dispensed and county-level data on buprenorphine-waivered physicians and substance abuse treatment facilities. Multivariate ordinary least squares regression model with state fixed effects",
  "Research Question": "Impact of 2006 legislation increasing waived physician patient limits from 30 to 100 on buprenorphine use and its distribution in urban and rural settings",
  "Policy Implication 1": "Legislative changes can significantly increase buprenorphine use.",
  "Policy Implication 2": "Adjusting patient limits for waived physicians to enhance buprenorphine availability.",
  "Policy Implication 3": "Increasing buprenorphine dispensing rate through legislative measures.",
  "Policy Implication 4": "Focusing on the capacity of physicians rather than opening new treatment facilities.",
  "Policy Implication 5": "Evaluating the impact of legislative changes on buprenorphine use in both urban and rural settings.",
  "Result 1": "Significant association of 2006 legislation with increased buprenorphine use.",
  "Result 2": "Growth in buprenorphine use associated with 100-patient-waivered physicians.",
  "Result 3": "Increased buprenorphine use at a greater rate than the number of providers.",
  "Result 4": "Total number of waived physicians rose significantly.",
  "Result 5": "Effectiveness of relaxing patient limits for increasing buprenorphine use."
}
```

```
all_paper_data = [
  paper_data1, paper_data2, paper_data3, paper_data4, paper_data5,
```

```
paper_data6, paper_data7, paper_data8, paper_data9, paper_data10,  
paper_data11, paper_data12, paper_data13, paper_data14, paper_data15,  
paper_data16, paper_data17, paper_data18, paper_data19, paper_data20,  
paper_data21, paper_data22, paper_data23, paper_data24, paper_data25,  
paper_data26, paper_data27, paper_data28, paper_data29, paper_data30,  
paper_data31, paper_data32, paper_data33, paper_data34, paper_data35,  
paper_data36, paper_data37, paper_data38, paper_data39, paper_data40,  
paper_data41, paper_data42, paper_data43, paper_data44, paper_data45,  
paper_data46, paper_data47, paper_data48, paper_data49, paper_data50  
]
```

```
# Convert each paper's data into a DataFrame  
all_papers_df = pd.concat([pd.DataFrame([data]) for data in  
all_paper_data], ignore_index=True)
```

```
# Define the file path  
file_path = r'C:\Users\Mengyang\Desktop\Evidence-Based.xlsx' # Replace  
'my_excel_file.xlsx' with your desired file name
```

```
# Save the DataFrame to an Excel file  
all_papers_df.to_excel(file_path, index=False)
```

```
#Recovery Support Services
```

```
paper_data51 = {  
    "Title": "A randomized trial of 6-month methadone maintenance with  
standard or minimal counseling versus 21-day methadone detoxification",  
    "Year": 2008,  
    "Journal": "Drug and Alcohol Dependence",  
    "Main Methodology": "Randomized prospective trial with three  
outpatient treatment arms: 21-day methadone detoxification, 6 months of  
methadone maintenance with minimal counseling, and 6 months of methadone  
maintenance with standard counseling",  
    "Research Question": "To assess the effectiveness of 6-month  
methadone maintenance with either minimal or standard counseling compared  
to 21-day methadone detoxification in reducing opiate positive urine  
tests and days of self-reported heroin and alcohol use",  
    "Policy Implication 1": "Support for longer-term methadone  
maintenance over short-term detoxification in reducing opioid use.",  
    "Policy Implication 2": "Minimal counseling in methadone maintenance  
can be as effective as standard counseling.",  
    "Policy Implication 3": "Need for appropriate methadone dosing,  
considering variability in patient response.",  
    "Policy Implication 4": "Exploring the potential of minimal  
counseling programs for easier scalability.",  
    "Policy Implication 5": "Emphasizing retention in treatment as a key  
outcome measure.",  
    "Result 1": "Reduced heroin and alcohol use in 6-month maintenance  
compared to detoxification.",  
    "Result 2": "No significant impact on cocaine use.",  
    "Result 3": "Similar outcomes in heroin use reduction for both  
minimal and standard counseling.",  
    "Result 4": "Methadone doses ranging from 60-90 mg in the study.",  
}
```

```
    "Result 5": "Comparable retention rates in both minimal and standard
maintenance groups."
}
```

```
paper_data52 = {
  "Title": "Benefits of peer support groups in the treatment of
addiction",
  "Year": 2016,
  "Journal": "Substance Abuse and Rehabilitation",
  "Main Methodology": "Literature review assessing the effects of peer
support groups as part of peer support services in the treatment of
addiction",
  "Research Question": "To assess the effects of peer support groups,
one aspect of peer support services, in the treatment of addiction",
  "Policy Implication 1": "Integrating peer support groups to enhance
addiction treatment efficacy.",
  "Policy Implication 2": "Leveraging peer support to improve treatment
engagement and adherence.",
  "Policy Implication 3": "Utilizing peer support groups for reducing
recidivism in substance use.",
  "Policy Implication 4": "Addressing substance craving through peer
support programs.",
  "Policy Implication 5": "Expanding access to peer support services
post discharge from outpatient treatment",
  "Result 1": "Reductions in substance use associated with peer support
groups.",
  "Result 2": "Enhanced treatment engagement due to peer support.",
  "Result 3": "Effectiveness of peer support in reducing recidivism.",
  "Result 4": "Benefits of peer support in addressing cravings in
formerly incarcerated adults.",
  "Result 5": "Peer support groups as an integral component of
addiction treatment."
}
```

```
paper_data53 = {
  "Title": "Collaborative Care of Opioid-Addicted Patients in Primary
Care Using Buprenorphine Five-Year Experience",
  "Year": 2011,
  "Journal": "Archives of Internal Medicine",
  "Main Methodology": "Cohort study of patients treated for opioid
addiction using collaborative care between nurse care managers and
generalist physicians in an urban academic primary care practice over 5
years",
  "Research Question": "How effective is collaborative care between
nurse care managers and physicians in treating opioid addiction in
primary care using buprenorphine?",
  "Policy Implication 1": "Adopting a collaborative care model for
opioid addiction treatment in primary care settings.",
  "Policy Implication 2": "Tailoring treatment approaches to
demographic factors like race and employment status.",
}
```

```
"Policy Implication 3": "Incorporating a comprehensive treatment
model, including assessment and maintenance stages.",
"Policy Implication 4": "Requiring adherence to treatment protocols
including drug testing and counseling.",
"Policy Implication 5": "Discharging non-adherent patients while
providing support for continued care.",
"Result 1": "Over 50% treatment success at 1 year with collaborative
care model.",
"Result 2": "High rate of abstinence from illicit opioids and cocaine
among patients in treatment at 12 months.",
"Result 3": "Differences in treatment success based on age,
employment status, and race/ethnicity.",
"Result 4": "Treatment model effectiveness demonstrated over a 5-year
period.",
"Result 5": "Treatment adherence as a critical factor for successful
outcomes."
}
```

```
paper_data54 = {
  "Title": "Do Peer Recovery Specialists Improve Outcomes for
Individuals with Substance Use Disorder in an Integrative Primary Care
Setting? A Program Evaluation",
  "Year": 2020,
  "Journal": "Journal of Clinical Psychology in Medical Settings",
  "Main Methodology": "Program evaluation in an FQHC with a focus on
the impact of Peer Recovery Specialists (PRSs) on patients' substance
use, healthcare involvement, and criminal justice involvement",
  "Research Question": "Does the integration of PRSs into primary care
settings improve outcomes for patients with substance use disorder?",
  "Policy Implication 1": "Efficacy of PRS integration in primary care
for substance use disorder improvement.",
  "Policy Implication 2": "Utilizing PRS to increase patient engagement
in medical services.",
  "Policy Implication 3": "Addressing implementation challenges of PRS,
particularly with a criminal justice history.",
  "Policy Implication 4": "Supporting research to validate PRS
effectiveness in various healthcare settings.",
  "Policy Implication 5": "Encouraging school enrollment and employment
through PRS support.",
  "Result 1": "Significant reduction in substance use and increased
continuous abstinence post-PRS program.",
  "Result 2": "Statistical reduction in days of substance use at the 6-
month follow-up.",
  "Result 3": "Improved engagement in medical services and
education/employment post-program.",
  "Result 4": "Study limitations affecting internal validity.",
  "Result 5": "Corroboration of positive PRS outcomes in integrated
healthcare settings."
}
```



```
paper_data55 = {
  "Title": "Group-based treatment of opioid use disorder with
buprenorphine: A systematic review",
  "Year": 2018,
  "Journal": "Journal of Substance Abuse Treatment",
  "Main Methodology": "Systematic Literature Review",
  "Research Question": "Assessing the feasibility, acceptability, and
efficacy of Group-Based Opioid Treatment (GBOT)",
  "Policy Implication 1": "Potential of GBOT as a more accessible and
cost-effective treatment option.",
  "Policy Implication 2": "Need for more comprehensive research to
establish GBOT's efficacy.",
  "Policy Implication 3": "Increasing provider feasibility through
group sessions.",
  "Policy Implication 4": "Exploring patient acceptability of GBOT.",
  "Policy Implication 5": "Expanding GBOT to enhance comprehensive
medication management.",
  "Result 1": "Limited strong evidence for GBOT's additive effect.",
  "Result 2": "Feasibility and acceptability of GBOT among patients.",
  "Result 3": "GBOT allows for more patient sessions per group visit.",
  "Result 4": "Lack of well-designed, multi-site randomized controlled
trials for GBOT.",
  "Result 5": "None"
}
```

```
paper_data56 = {
  "Title": "Harm reduction and recovery services support (HRRSS) to
mitigate the opioid overdose epidemic in a rural community",
  "Year": 2023,
  "Journal": "Substance Abuse Treatment Prevention and Policy",
  "Main Methodology": "Survey Analysis",
  "Research Question": "Identifying factors associated with support for
harm reduction and recovery services in a rural community affected by the
opioid overdose epidemic",
  "Policy Implication 1": "Improving community support for harm
reduction and recovery services.",
  "Policy Implication 2": "Targeting comprehensive interventions to
improve OUD-related knowledge and reduce stigma.",
  "Policy Implication 3": "Addressing the generational and employment
status gaps in understanding and support for OUD.",
  "Policy Implication 4": "Highlighting the need for educational
efforts on OUD as a disease.",
  "Policy Implication 5": "Enhancing community engagement in harm
reduction strategies.",
  "Result 1": "General agreement on the potential for addiction to pain
medications and recovery from OUD.",
  "Result 2": "Variation in HRRSS support based on age and employment
status.",
  "Result 3": "Understanding of OUD as a disease linked to higher
support for HRRSS.",
  "Result 4": "Low overall support for harm reduction in the studied
community.",
  "Result 5": "None"
}
```

```
}
```

```
paper_data57 = {  
  "Title": "How Many Recovery Attempts Does it Take to Successfully  
Resolve an Alcohol or Drug Problem?",  
  "Year": 2019,  
  "Journal": "ALCOHOLISM: CLINICAL AND EXPERIMENTAL RESEARCH",  
  "Main Methodology": "Cross-sectional nationally representative  
survey",  
  "Research Question": "Patterns of cessation attempts related to  
alcohol, opioid, stimulant, or cannabis problems and associated  
factors.",  
  "Policy Implication 1": "Recognition of diverse recovery paths and  
need for long-term support strategies.",  
  "Policy Implication 2": "Addressing higher recovery attempt needs in  
individuals with psychiatric comorbidity and Black race.",  
  "Policy Implication 3": "Equalizing access to recovery resources  
regardless of the primary substance.",  
  "Policy Implication 4": "Identifying and mitigating factors  
contributing to greater psychological distress in recovery.",  
  "Policy Implication 5": "Understanding the impact of mutual-help  
groups and treatment on recovery journey.",  
  "Result 1": "Average of 5.35 recovery attempts, with substantial  
variance in attempts.",  
  "Result 2": "No primary substance-based difference in recovery  
attempts.",  
  "Result 3": "Link between greater number of attempts and current  
psychological distress.",  
  "Result 4": "Differences in recovery attempts based on treatment  
history and psychiatric diagnoses.",  
  "Result 5": "Skewed overall distribution of recovery attempts."  
}
```

```
paper_data58 = {  
  "Title": "Implementing peer recovery services for overdose prevention  
in Rhode Island: An examination of two outreach-based approaches",  
  "Year": 2019,  
  "Journal": "Addictive Behaviors",  
  "Main Methodology": "Descriptive Analysis of Peer Recovery Programs",  
  "Research Question": "To describe the activities and implementation  
process of AnchorED and AnchorMORE's peer recovery services.",  
  "Policy Implication 1": "Highlighting the potential of peer recovery  
services in emergency settings.",  
  "Policy Implication 2": "Demonstrating effective community outreach  
through naloxone distribution and service referrals.",  
  "Policy Implication 3": "Identifying effective strategies for  
overdose response and treatment engagement.",  
  "Policy Implication 4": "Evaluating limitations and areas for further  
research in peer recovery services.",  
  "Policy Implication 5": "Understanding the adaptability and impact of  
peer recovery programs in diverse settings.",  
  "Result 1": "High engagement and successful naloxone training in  
emergency departments.",  
}
```

```
    "Result 2": "Substantial community outreach with naloxone
distribution and service referrals.",
    "Result 3": "High engagement rates indicating potential impact on
high-risk populations.",
    "Result 4": "Challenges in individual characteristic analysis and
retrospective study limitations.",
    "Result 5": "Need for further research on long-term outcomes post-
discharge."
}
```

```
paper_data59 = {
  "Title": "Long-term outcomes of office-based buprenorphine/naloxone
maintenance therapy",
  "Year": 2010,
  "Journal": "Drug and Alcohol Dependence",
  "Main Methodology": "Retrospective Chart Review and Cross-sectional
Telephone Interview",
  "Research Question": "Impact of socioeconomic status and other
patient characteristics on the duration and clinical effects of
buprenorphine/naloxone maintenance therapy",
  "Policy Implication 1": "Supporting the long-term effectiveness of
buprenorphine/naloxone therapy across socioeconomic groups.",
  "Policy Implication 2": "Highlighting the importance of employment
and treatment entry factors in therapy retention.",
  "Policy Implication 3": "Demonstrating the psychosocial benefits of
sustained buprenorphine/naloxone treatment.",
  "Policy Implication 4": "Evaluating quality of life improvements and
employment outcomes in low SES patients.",
  "Policy Implication 5": "Combining buprenorphine/naloxone with
abstinence-based programs for enhanced outcomes.",
  "Result 1": "High retention rate in buprenorphine/naloxone therapy
regardless of SES.",
  "Result 2": "Association of continuous treatment with lower substance
use and higher employment.",
  "Result 3": "Improvement in psychosocial functioning and abstinence
with therapy.",
  "Result 4": "Employment status and opioid type affecting therapy
retention.",
  "Result 5": "Similar quality of life improvements across SES groups."
}
```

```
paper_data60 = {
  "Title": "Mobile opioid agonist treatment and public funding expands
treatment for disenfranchised opioid-dependent individuals",
  "Year": 2014,
  "Journal": "Journal of Substance Abuse Treatment",
  "Main Methodology": "Analysis of NJ-MATI Program",
  "Research Question": "How to reduce barriers to treatment and promote
engagement in opioid agonist treatment (OAT) for disenfranchised
individuals.",
}
```

```

    "Policy Implication 1": "Addressing the need for accessible OAT for
marginalized demographics including African Americans, homeless, and
uninsured.",
    "Policy Implication 2": "Emphasizing the importance of public funding
in removing financial barriers to OAT.",
    "Policy Implication 3": "Focusing on injection drug users,
highlighting a group with higher clinical severity and treatment needs.",
    "Policy Implication 4": "Highlighting systemic changes to increase
participation in OAT among high-severity substance users.",
    "Policy Implication 5": "Improving geographical access to treatment
facilities.",
    "Result 1": "NJ-MATI's successful engagement of predominantly male,
African-American, and uninsured individuals.",
    "Result 2": "High substance use severity among NJ-MATI clients
compared to traditional methadone clients.",
    "Result 3": "NJ-MATI's effectiveness in making OAT accessible to
high-severity substance users.",
    "Result 4": "Early initiation of drug use and daily use among NJ-MATI
clients.",
    "Result 5": "None"
}

```

```

paper_data61 = {
    "Title": "Office-Based Opioid Treatment with Buprenorphine: Statewide
Implementation of the Massachusetts Collaborative Care Model in Community
Health Centers",
    "Year": 2016,
    "Journal": "Journal of Substance Abuse Treatment",
    "Main Methodology": "Dissemination and Implementation of OBOT-B
Model",
    "Research Question": "Disseminating the OBOT-B Massachusetts Model
from Boston Medical Center to 14 community health centers (CHCs) in
Massachusetts.",
    "Policy Implication 1": "Demonstrating the scalability of OBOT in
community health centers.",
    "Policy Implication 2": "Significant increase in waived physicians
through the OBOT model.",
    "Policy Implication 3": "Effective engagement of minority populations
in opioid treatment.",
    "Policy Implication 4": "Integrating addiction treatment into primary
care via the OBOT-B Model.",
    "Policy Implication 5": "Utilizing Nurse Care Managers for complex
patient care in addiction treatment.",
    "Result 1": "Expansion of OBOT in community health centers with
increased waived physicians.",
    "Result 2": "Notable increase in annual admissions of OBOT
patients.",
    "Result 3": "Long-term engagement in treatment for most OBOT-B
patients.",
    "Result 4": "Successful integration of addiction treatment into
primary care.",
}

```

```
    "Result 5": "Continuity of treatment ensured through provider network  
in case of practice closures."  
}
```

```
paper_data62 = {  
  "Title": "Online digital recovery support services: An overview of  
the science and their potential to help individuals with substance use  
disorder during COVID-19 and beyond",  
  "Year": 2021,  
  "Journal": "Journal of Substance Abuse Treatment",  
  "Main Methodology": "Narrative Review",  
  "Research Question": "Exploring the therapeutic benefits, potential  
drawbacks, and effectiveness of online digital recovery support services  
(D-RSS) for individuals with substance use disorder.",  
  "Policy Implication 1": "Utilizing digital platforms to maintain  
addiction support during public health crises.",  
  "Policy Implication 2": "Identifying the benefits and limitations of  
D-RSS in providing recovery support.",  
  "Policy Implication 3": "Assessing the effectiveness of D-RSS  
compared to in-person services.",  
  "Policy Implication 4": "Addressing the digital divide to ensure  
equitable access to D-RSS.",  
  "Policy Implication 5": "Enhancing social and emotional connections  
in digital recovery spaces.",  
  "Result 1": "Positive user experience and supportiveness reported in  
D-RSS use.",  
  "Result 2": "Potential benefits of anonymity in D-RSS  
participation.",  
  "Result 3": "Challenges in active recovery involvement in digital  
settings.",  
  "Result 4": "Theoretical benefits of D-RSS including shared  
experience and recovery self-efficacy.",  
  "Result 5": "Accessibility issues and the impact on certain  
demographics."  
}
```

```
paper_data63 = {  
  "Title": "Outreach to people who survive opioid overdose: Linkage and  
retention in treatment",  
  "Year": 2020,  
  "Journal": "Journal of Substance Abuse Treatment",  
  "Main Methodology": "Pilot Study of an Intervention",  
  "Research Question": "Can a specialized mobile response team  
effectively engage and retain people who have survived an overdose in a  
comprehensive treatment program?",  
  "Policy Implication 1": "Implementing assertive outreach programs to  
engage overdose survivors in treatment.",  
  "Policy Implication 2": "Addressing the needs of the uninsured and  
homeless population in addiction treatment.",  
  "Policy Implication 3": "Enhancing motivation for long-term treatment  
among overdose survivors.",  
  "Policy Implication 4": "Identifying and overcoming limitations in  
outreach programs, including expanding to non-English speakers.",  
}
```

```
    "Policy Implication 5": "Adapting outreach strategies to maintain
engagement over time.",
    "Result 1": "High initial treatment engagement rate at 30 days, with
a decline observed after 90 days.",
    "Result 2": "Demographics of participants: majority male, uninsured,
and in unstable housing situations.",
    "Result 3": "One-third of overdose survivors showing willingness to
engage in treatment.",
    "Result 4": "None",
    "Result 5": "None"
}
```

```
paper_data64 = {
  "Title": "Peer-delivered harm reduction and recovery support
services: initial evaluation from a hybrid recovery community drop-in
center and syringe exchange program",
  "Year": 2018,
  "Journal": "Harm Reduction Journal",
  "Main Methodology": "Cross-sectional Design Analysis",
  "Research Question": "Evaluation of a hybrid recovery community
organization providing peer-based harm reduction services via a syringe
exchange program.",
  "Policy Implication 1": "Integrating syringe exchange into recovery
community organizations.",
  "Policy Implication 2": "Focusing outreach and education on
marginalized groups like the homeless and justice-involved.",
  "Policy Implication 3": "Tailoring harm reduction services to address
the needs of specific demographics, including LatinX and bisexual
communities.",
  "Policy Implication 4": "Adapting services for individuals with
previous infections and mental health diagnoses.",
  "Policy Implication 5": "Exploring the relationships between
homelessness, criminal justice involvement, and engagement in harm
reduction services.",
  "Result 1": "Multiple engagements with the hybrid recovery program,
indicating effectiveness.",
  "Result 2": "High rates of sterile syringe provision, demonstrating
the program's reach.",
  "Result 3": "Significant relationships between participants'
backgrounds and their engagement levels.",
  "Result 4": "Higher engagement rates among bisexual participants in
naloxone administration.",
  "Result 5": "HIV-positive participants engaging more actively in
syringe exchange."
}
```

```
paper_data65 = {
  "Title": "Peer recovery coaches in general medical settings: Changes
in utilization, treatment engagement and opioid use",
  "Year": 2021,
  "Journal": "Journal of Substance Abuse Treatment",
  "Main Methodology": "Analysis of Recovery Coach Program",
}
```

```
    "Research Question": "Evaluation of peer recovery coaches' impact on
healthcare utilization, treatment engagement, and opioid abstinence.",
    "Policy Implication 1": "Utilizing peer recovery coaches to reduce
hospitalization and emergency department visits.",
    "Policy Implication 2": "Promoting outpatient service engagement
through recovery coach contact.",
    "Policy Implication 3": "Enhancing buprenorphine treatment engagement
and opioid abstinence with peer support.",
    "Policy Implication 4": "Addressing limitations of recovery coach
programs in chart review and distinguishing between SUD-related and non-
SUD-related utilization.",
    "Policy Implication 5": "Focusing future research on implementation
and real-world challenges of recovery coach programs.",
    "Result 1": "Significant decrease in hospitalizations and emergency
department visits post-recovery coach contact.",
    "Result 2": "Notable increase in outpatient utilization and treatment
engagement.",
    "Result 3": "Greater odds of treatment engagement and opioid
abstinence with recovery coach support.",
    "Result 4": "None",
    "Result 5": "None"
}
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```
paper_data66 = {
    "Title": "Recovery from opioid addiction in DATOS",
    "Year": 2003,
    "Journal": "Journal of Substance Abuse Treatment",
    "Main Methodology": "5-year followup study",
    "Research Question": "Attributions for long-term recovery in a 5-year
followup of admissions to outpatient methadone treatment programs.",
    "Policy Implication 1": "Emphasizing personal motivation and
treatment experiences in recovery programs.",
    "Policy Implication 2": "Incorporating religion/spirituality, family,
and career support in recovery strategies.",
    "Policy Implication 3": "Developing social networks for ongoing
support from family and friends.",
    "Policy Implication 4": "Focusing on holistic improvement, including
socialization, lifestyle, health, and personal growth.",
    "Policy Implication 5": "Encouraging beliefs centered around social
responsibilities and self-recognition as part of recovery.",
    "Result 1": "28% recovery rate at Year 5, highlighting the importance
of various recovery support sources.",
    "Result 2": "Demographic overview indicating a diverse patient
population with various substance use issues.",
    "Result 3": "Improvement in functional areas for recovering
individuals.",
    "Result 4": "None",
    "Result 5": "None"
}
```

```
paper_data67 = {
    "Title": "Recovery housing: Assessing the Evidence",
```

```

    "Year": 2014,
    "Journal": "Psychiatric Services",
    "Main Methodology": "Literature Review",
    "Research Question": "Effectiveness of recovery housing and its value
as a service within the continuum of care for substance use disorders.",
    "Policy Implication 1": "Recognizing the moderate level of evidence
supporting recovery housing's effectiveness.",
    "Policy Implication 2": "Addressing research design limitations to
strengthen future studies on recovery housing.",
    "Policy Implication 3": "Standardizing definitions and program
elements for consistent evaluation across programs.",
    "Policy Implication 4": "Focusing on longer stays in recovery housing
for better outcomes, especially for younger residents.",
    "Policy Implication 5": "Conducting research to evaluate various
models of recovery housing and their long-term impacts.",
    "Result 1": "Positive outcomes in substance use, employment, and
criminal activity related to recovery housing.",
    "Result 2": "Methodological flaws affecting the assessment of
recovery housing effectiveness.",
    "Result 3": "Relationship between longer stays and improved
outcomes.",
    "Result 4": "None",
    "Result 5": "None"
}

```

```

paper_data68 = {
    "Title": "Reinforcement-based therapy: 12-month evaluation of an
outpatient drug-free treatment for heroin abusers",
    "Year": 2005,
    "Journal": "Drug and Alcohol Dependence",
    "Main Methodology": "Controlled Study",
    "Research Question": "Efficacy of reinforcement-based therapy (RBT)
for producing enhanced abstinence outcomes in opioid-dependent
patients.",
    "Policy Implication 1": "Implementing RBT to achieve higher
abstinence rates from opioids and cocaine in the short term.",
    "Policy Implication 2": "Improving employment outcomes and legal
income through RBT interventions.",
    "Policy Implication 3": "Assessing the long-term efficacy of RBT
beyond initial follow-up periods.",
    "Policy Implication 4": "None",
    "Policy Implication 5": "None",
    "Result 1": "Higher abstinence rates in the RBT group at 1 and 3
months, but not sustained at 6 or 12 months.",
    "Result 2": "Increased days worked and legal income in the RBT
group.",
    "Result 3": "Significant main effect of RBT on employment outcomes.",
    "Result 4": "None",
    "Result 5": "None"
}

```

```

paper_data69 = {

```



```

    "Title": "Role of the Hospital in the 21st Century Opioid Overdose
Epidemic: The Addiction Medicine Consult Service",
    "Year": 2019,
    "Journal": "Journal of Addiction Medicine",
    "Main Methodology": "Qualitative Interviews and Analysis",
    "Research Question": "Exploring the structure and design elements of
addiction medicine consult (AMC) services within US hospitals.",
    "Policy Implication 1": "Improving availability and coverage of AMC
services, including weekend consults and emergency department support.",
    "Policy Implication 2": "Enhancing hospital-wide culture change
regarding addiction treatment through AMC services.",
    "Policy Implication 3": "Integrating peer support specialists into
AMC teams despite challenges.",
    "Policy Implication 4": "Promoting hospital-wide education on federal
OUD treatment policy.",
    "Policy Implication 5": "Developing comprehensive and consistent AMC
services, with a focus on availability during weekends and in emergency
departments.",
    "Result 1": "Variability in AMC services' availability and
interprofessional team composition.",
    "Result 2": "Challenges faced by AMC services in financing and policy
development.",
    "Result 3": "Significant role of AMC services in hospital policy
development related to OUD treatment.",
    "Result 4": "None",
    "Result 5": "None"
}

```

```

paper_data70 = {
    "Title": "Self-Help Groups And Medication Use In Opioid Addiction
Treatment: A National Analysis",
    "Year": 2020,
    "Journal": "Health Affairs",
    "Main Methodology": "National Analysis of Treatment Data",
    "Research Question": "Exploring the use of self-help groups and
medications in opioid addiction treatment and their relative
utilization.",
    "Policy Implication 1": "Increasing harmonization of self-help groups
with evidence-based medications for comprehensive treatment.",
    "Policy Implication 2": "Addressing regional differences in self-help
group use and medication availability.",
    "Policy Implication 3": "Improving medication access for uninsured or
those with restrictive private health plans.",
    "Policy Implication 4": "Encouraging policy changes to ensure
patients in self-help groups face less resistance to medication use.",
    "Policy Implication 5": "Creating multimodal paths to recovery that
combine self-help groups with medication.",
    "Result 1": "Varied utilization of self-help groups and medications
in opioid addiction treatment across different facilities and patient
groups.",
    "Result 2": "Differences in treatment choice based on insurance
status and facility type.",
}

```

```
    "Result 3": "Potential of combining medication treatment with self-  
help for improved outcomes.",  
    "Result 4": "None",  
    "Result 5": "None"  
}
```

```
paper_data71 = {  
    "Title": "Sober living houses for alcohol and drug dependence: 18-  
Month outcomes",  
    "Year": 2010,  
    "Journal": "Journal of Substance Abuse Treatment",  
    "Main Methodology": "Longitudinal Study",  
    "Research Question": "Effectiveness of sober living houses (SLHs) in  
supporting recovery from alcohol and drug dependence.",  
    "Policy Implication 1": "Promoting longer stays in SLHs for improved  
outcomes in addiction recovery.",  
    "Policy Implication 2": "Focusing on the influence of substance use  
in social networks on recovery outcomes.",  
    "Policy Implication 3": "Incorporating involvement in 12-step groups  
as a significant factor in recovery success.",  
    "Policy Implication 4": "Evaluating and addressing the impact of  
social network variables on addiction recovery outcomes.",  
    "Policy Implication 5": "None",  
    "Result 1": "Improvements in ASI scales and reductions in arrests and  
substance use among SLH residents.",  
    "Result 2": "Changes in the length of stay and residency rates in  
SLHs over 18 months.",  
    "Result 3": "Increase in abstinence and decrease in peak density of  
substance use.",  
    "Result 4": "None",  
    "Result 5": "None"  
}
```

```
paper_data72 = {  
    "Title": "To House or Not to House: The Effects of Providing Housing  
to Homeless Substance Abusers in Treatment",  
    "Year": 2005,  
    "Journal": "American Journal of Public Health",  
    "Main Methodology": "Study of Treatment Outcomes Under Different  
Housing Conditions",  
    "Research Question": "How treatment outcomes are affected under  
different housing provision conditions for homeless substance abusers.",  
    "Policy Implication 1": "Evaluating the effectiveness of providing  
housing to homeless substance abusers in treatment.",  
    "Policy Implication 2": "Assessing the correlation between housing  
provision and drug abstinence in treatment programs.",  
    "Policy Implication 3": "Understanding the impact of housing  
provision on employment maintenance and retention in treatment.",  
    "Policy Implication 4": "None",  
    "Policy Implication 5": "None",  
    "Result 1": "Higher prevalence of drug abstinence in groups provided  
with housing.",
```

```
    "Result 2": "Significant improvement in maintaining employment and housing across all groups.",
    "Result 3": "Evidence of within-group housing changes indicating the positive impact of housing provision.",
    "Result 4": "None",
    "Result 5": "None"
}
```

```
additional_paper_data2 = [
    paper_data51, paper_data52, paper_data53, paper_data54, paper_data55,
    paper_data56, paper_data57, paper_data58, paper_data59, paper_data60,
    paper_data61, paper_data62, paper_data63, paper_data64, paper_data65,
    paper_data66, paper_data67, paper_data68, paper_data69, paper_data70,
    paper_data71, paper_data72
]
```

```
# Convert each paper's data into a DataFrame
all_papers_df2 = pd.concat([pd.DataFrame([data]) for data in
additional_paper_data2], ignore_index=True)
```

```
# Define the file path
file_path = r'C:\Users\Mengyang\Desktop\Recovery.xlsx' # Replace
'my_excel_file.xlsx' with your desired file name
```

```
# Save the DataFrame to an Excel file
all_papers_df2.to_excel(file_path, index=False)
```

```
#Post Overdose Response
```

```
paper_data73 = {
    "Title": "Addressing opioid misuse: Hero Help as a recovery and behavioural health response",
    "Year": 2021,
    "Journal": "Journal of Community Safety and Well-Being",
    "Methodology": "Descriptive analysis of the Hero Help program",
    "Research Question": "How does the Hero Help program address opioid misuse and its outcomes?",
    "Policy Implication 1": "Supportive services for substance use disorder",
    "Policy Implication 2": "Decrease in fatal and non-fatal overdoses",
    "Policy Implication 3": "Reduction in criminal justice involvement",
    "Policy Implication 4": "Provision of immediate treatment opportunities",
    "Policy Implication 5": "Improvement of program credibility via community outreach",
    "Result 1": "Increase in detox program completion and post-detox care",
    "Result 2": "Decrease in participant arrests",
    "Result 3": "Expansion of treatment provider partnerships",
    "Result 4": "Enhanced outreach to non-fatal overdose individuals",
    "Result 5": "Data-driven program improvement"
```

```
}
```

```
paper_data74 = {  
  "Title": "A scoping review of community-based post-opioid overdose  
intervention programs",  
  "Year": 2023,  
  "Journal": "Health & Justice",  
  "Methodology": "Scoping review using PRISMA checklist, focusing on  
post-overdose interventions",  
  "Research Question": "Structure and outcomes of community-based post-  
overdose intervention programs",  
  "Policy Implication 1": "Collaboration and communication among  
multidisciplinary teams",  
  "Policy Implication 2": "Comprehensive wraparound services with MOUD  
treatment",  
  "Policy Implication 3": "Tailored interventions to reduce stigma in  
rural areas",  
  "Policy Implication 4": "Addressing structural racism's impact on  
justice involvement and substance use",  
  "Policy Implication 5": "Equitable community outreach, focusing on  
high-risk individuals",  
  "Result 1": "Variability in post-referral treatment initiation rate",  
  "Result 2": "Significant MOUD treatment retention rates",  
  "Result 3": "Emergence of law enforcement-partnered interventions",  
  "Result 4": "Barriers to treatment access like homelessness and lack  
of insurance",  
  "Result 5": "Potential law enforcement distrust affecting program  
engagement"  
}
```

```
paper_data75 = {  
  "Title": "A scoping review of post-opioid-overdose interventions",  
  "Year": 2019,  
  "Journal": "Preventive Medicine",  
  "Methodology": "Scoping review with PRISMA checklist",  
  "Research Question": "Characteristics and effectiveness of post-  
overdose interventions",  
  "Policy Implication 1": "Integration of peer recovery in  
interventions",  
  "Policy Implication 2": "Naloxone training and distribution  
emphasis",  
  "Policy Implication 3": "Standardized protocols in EDs for post-  
overdose care",  
  "Policy Implication 4": "Enhancement of community-based outreach  
programs",  
  "Policy Implication 5": "Policies for immediate addiction treatment  
access post-overdose",  
  "Result 1": "Variability in program structures and approaches",  
  "Result 2": "Significant role of peers in engagement and treatment",  
  "Result 3": "Challenges in standardizing interventions",  
  "Result 4": "Importance of community and ED collaborations",  
  "Result 5": "Evidence of effectiveness in certain interventions"
```

```
}
```

```
paper_data76 = {  
  "Title": "Association of Implementation of Postoverdose Outreach  
Programs With Subsequent Opioid Overdose Deaths",  
  "Year": 2023,  
  "Journal": "JAMA Psychiatry",  
  "Methodology": "Retrospective interrupted time-series analysis",  
  "Research Question": "Impact of postoverdose outreach programs on  
opioid fatality rates in Massachusetts municipalities",  
  "Policy Implication 1": "Postoverdose outreach programs' role in  
reducing opioid fatalities",  
  "Policy Implication 2": "Need for integrated public health and public  
safety strategies",  
  "Policy Implication 3": "Emphasis on cross-sectoral collaborations  
for intervention",  
  "Policy Implication 4": "Continuous monitoring and adaptation of  
outreach programs",  
  "Policy Implication 5": "Expanding programs for broader impact",  
  "Result 1": "Gradual decline in opioid fatality rates over time",  
  "Result 2": "Reduced opioid-related EMS response rates in  
implementing municipalities",  
  "Result 3": "Effectiveness in reducing opioid fatalities and EMS  
responses",  
  "Result 4": "Variability in program implementation",  
  "Result 5": "Importance of community-specific factors in program  
design"  
}
```

```
paper_data77 = {  
  "Title": "A Systematic Review of Community Opioid Overdose Prevention  
and Naloxone Distribution Programs",  
  "Year": 2014,  
  "Journal": "Journal of Addiction Medicine",  
  "Methodology": "Systematic review of OOPPs including naloxone  
distribution",  
  "Research Question": "Effectiveness and current state of literature  
on OOPPs",  
  "Policy Implication 1": "Strengthening community-based opioid  
overdose prevention programs",  
  "Policy Implication 2": "Widespread naloxone distribution and  
training",  
  "Policy Implication 3": "Addressing barriers to naloxone  
administration",  
  "Policy Implication 4": "Education to reduce stigma and improve  
response",  
  "Policy Implication 5": "Standardized protocols for overdose  
prevention",  
  "Result 1": "Effective use of naloxone by trained bystanders",  
  "Result 2": "Variability in participant demographics and outcomes",  
  "Result 3": "Increased knowledge and skills in overdose response",  
  "Result 4": "Challenges in standardizing interventions",  
}
```

```

    "Result 5": "Need for comprehensive evaluation of OOPPs"
}

paper_data78 = {
  "Title": "Characteristics of post-overdose outreach programs and
municipal-level opioid overdose in Massachusetts",
  "Year": 2023,
  "Journal": "International Journal of Drug Policy",
  "Methodology": "Segmented regression design to evaluate post-overdose
outreach programs",
  "Research Question": "Associations between post-overdose outreach
program characteristics and opioid overdose rates",
  "Policy Implication 1": "Inclusion of social services in outreach
programs",
  "Policy Implication 2": "Outreach contact rates' influence on
emergency responses",
  "Policy Implication 3": "Balancing coercion and harm reduction in
program design",
  "Policy Implication 4": "Considering local community needs in program
implementation",
  "Policy Implication 5": "Ongoing evaluation and adjustment of
strategies",
  "Result 1": "No significant association between outreach contact
rate, naloxone provision, and overdose trends",
  "Result 2": "Fewer fatal overdoses in municipalities with more social
services",
  "Result 3": "Lower emergency responses with below median outreach
contacts",
  "Result 4": "Variability in program implementation across
municipalities",
  "Result 5": "Need for further research to optimize program design"
}

paper_data79 = {
  "Title": "Developing the Opioid Rapid Response System™ for Lay
Citizen Response to the Opioid Overdose Crisis",
  "Year": 2023,
  "Journal": "Prevention Science",
  "Methodology": "Randomized controlled trial of the ORRS",
  "Research Question": "Effectiveness of ORRS in recruiting and
training for opioid overdose response",
  "Policy Implication 1": "Community-based overdose response
initiatives",
  "Policy Implication 2": "Training lay citizens in opioid overdose
response",
  "Policy Implication 3": "Strategic recruitment and training methods",
  "Policy Implication 4": "Use of digital training platforms for
dissemination",
  "Policy Implication 5": "Potential of lay citizen responders in
opioid crises",
  "Result 1": "Successful recruitment and training with ORRS",
  "Result 2": "Increased knowledge and self-efficacy in overdose
response",

```

```

    "Result 3": "Communal appeal effective in recruitment",
    "Result 4": "High engagement with the digital training module",
    "Result 5": "Future research needed for optimization of strategies"
}

paper_data80 = {
  "Title": "Educational training to improve opioid overdose response among health center staff",
  "Year": 2023,
  "Journal": "Harm Reduction Journal",
  "Methodology": "Hour-long training session with pre- and post-tests",
  "Research Question": "Does training improve knowledge and attitudes on opioid overdose response?",
  "Policy Implication 1": "Regular training on opioid overdose response for health staff",
  "Policy Implication 2": "Comprehensive educational programs to improve knowledge and attitudes",
  "Policy Implication 3": "Use of pre- and post-training assessments for effectiveness",
  "Policy Implication 4": "Inclusion of non-clinical staff in training",
  "Policy Implication 5": "Adaptation of training content based on feedback",
  "Result 1": "Improvement in knowledge and attitudes post-training",
  "Result 2": "High acceptability and positive feedback from staff",
  "Result 3": "Need for more interactive training approaches",
  "Result 4": "Value of including all staff levels in training",
  "Result 5": "Optimizing training content and length for future sessions"
}

```

```

paper_data81 = {
  "Title": "Emergency medical services targeting opioid user disorder: An exploration of current out-of-hospital post-overdose interventions",
  "Year": 2020,
  "Journal": "Journal Name Not Provided",
  "Methodology": "Narrative review using Arksey and O'Malley's framework",
  "Research Question": "Current out-of-hospital post-overdose interventions involving EMS in opioid use disorder",
  "Policy Implication 1": "Enhanced EMS engagement in post-overdose interventions",
  "Policy Implication 2": "Comprehensive community-based programs with EMS integration",
  "Policy Implication 3": "Effective partnerships between EMS, healthcare, and community organizations",
  "Policy Implication 4": "Innovative EMS outreach and education approaches",
  "Policy Implication 5": "Robust research and dissemination of EMS interventions in overdose scenarios",
  "Result 1": "Limited prevalence of published EMS post-overdose programs",

```

```
    "Result 2": "Models combining harm reduction, education, and referrals",
    "Result 3": "Use of peer support and law enforcement partnerships",
    "Result 4": "Variability in program structures and focus",
    "Result 5": "Need for evidence-based guidelines and dissemination"
}
```

```
paper_data82 = {
  "Title": "Law Enforcement-Based Outreach and Treatment Referral as a Response to Opioid Misuse",
  "Year": 2022,
  "Journal": "Police Quarterly",
  "Methodology": "Time series analysis of Hero Help program's impact on overdoses",
  "Research Question": "Effectiveness of Hero Help program in reducing overdoses and costs",
  "Policy Implication 1": "Law enforcement-based programs reducing opioid overdoses",
  "Policy Implication 2": "Combining law enforcement and health services for opioid response",
  "Policy Implication 3": "Monitoring and adaptation of outreach programs",
  "Policy Implication 4": "Collaboration between law enforcement, health services, and communities",
  "Policy Implication 5": "Cost savings through effective opioid misuse interventions",
  "Result 1": "Decrease in nonfatal and fatal overdoses per month",
  "Result 2": "Community cost savings of $21.5 million per month",
  "Result 3": "Importance of program expansions",
  "Result 4": "Need for further research on program design",
  "Result 5": "Integration of law enforcement in public health strategies"
}
```

```
paper_data83 = {
  "Title": "Post opioid overdose outreach by public health and public safety agencies",
  "Year": 2018,
  "Journal": "International Journal of Drug Policy",
  "Methodology": "Online questionnaire and telephone interviews",
  "Research Question": "Structures and functions of collaborative post-overdose outreach programs in Massachusetts",
  "Policy Implication 1": "Collaborative efforts between public health and public safety in post-overdose outreach",
  "Policy Implication 2": "Effective structuring to connect survivors with support and treatment",
  "Policy Implication 3": "Potential in reducing fatal opioid overdose risks",
  "Policy Implication 4": "Need for tailored approaches in program implementation",
  "Policy Implication 5": "Broad engagement strategies for reaching survivors and networks",
}
```



```

    "Result 1": "Collaborative programs implemented in 21% of responding
communities",
    "Result 2": "Four types of program structures identified",
    "Result 3": "Emerging approach to connect survivors to services",
    "Result 4": "Enhancement of engagement with social service and
addiction treatment",
    "Result 5": "Need for further research and systematic documentation"
}

```

```

paper_data84 = {
    "Title": "The Massachusetts Department of Public Health Post Overdose
Support Team Initiative",
    "Year": 2022,
    "Journal": "Journal Name Not Provided",
    "Methodology": "Implementation of the POST initiative with a person-
centered approach",
    "Research Question": "Engagement and outcomes of the POST initiative
in overdose response",
    "Policy Implication 1": "Integration of public health and public
safety in post-overdose outreach",
    "Policy Implication 2": "Importance of harm reduction in engaging
overdose survivors",
    "Policy Implication 3": "Connecting survivors to support services and
treatment",
    "Policy Implication 4": "Significance of person-centered models in
overdose response",
    "Policy Implication 5": "Potential to reduce subsequent overdoses and
improve public health",
    "Result 1": "Attempted outreach to 5,634 survivors with 53.5% success
rate",
    "Result 2": "Engagement of survivors directly or through social
networks",
    "Result 3": "Provision of services including naloxone kits and
overdose response planning",
    "Result 4": "Early evidence of initiative's effectiveness in health
improvement and risk reduction",
    "Result 5": "Recommendations for future evaluations of long-term
outcomes"
}

```

```

additional_paper_data3=[
    paper_data73, paper_data74, paper_data75, paper_data76, paper_data77,
    paper_data78, paper_data79, paper_data80, paper_data81, paper_data82,
    paper_data83, paper_data84
]

```

```

# Convert each paper's data into a DataFrame
all_papers_df3 = pd.concat([pd.DataFrame([data]) for data in
additional_paper_data3], ignore_index=True)

```

```

# Define the file path

```

```

file_path = r'C:\Users\Mengyang\Desktop\Overdose.xlsx' # Replace
'my_excel_file.xlsx' with your desired file name

# Save the DataFrame to an Excel file
all_papers_df3.to_excel(file_path, index=False)

# Criminal

paper_data85 = {
    "Title": "A Scoping Review of Barriers and Facilitators to
Implementation of Medications for Treatment of Opioid Use Disorder within
the Criminal Justice System",
    "Year": 2020,
    "Journal": "Journal Name Not Provided",
    "Methodology": "Scoping review following PRISMA guidelines",
    "Research Question": "Barriers and facilitators to implementing MOUD
in criminal justice settings",
    "Policy Implication 1": "Addressing systemic and institutional
barriers to MOUD",
    "Policy Implication 2": "Developing supportive policies for MOUD
implementation",
    "Policy Implication 3": "Training of criminal justice personnel on
MOUD",
    "Policy Implication 4": "Integration of MOUD into criminal justice
settings",
    "Policy Implication 5": "Collaboration between criminal justice and
healthcare for MOUD access",
    "Result 1": "53 papers addressing MOUD implementation barriers and
facilitators",
    "Result 2": "Themes related to institutional, programmatic,
attitudinal, and systemic factors",
    "Result 3": "Complexity of MOUD implementation in criminal justice
context",
    "Result 4": "Need for multi-faceted strategies for implementation
challenges",
    "Result 5": "Importance of addressing systemic and individual-level
barriers"
}

paper_data86 = {
    "Title": "Community-Based Methadone Maintenance in a Large Detention
Center is Associated with Decreases in Inmate Recidivism",
    "Year": 2016,
    "Journal": "Journal of Substance Abuse Treatment",
    "Methodology": "Retrospective data analysis of 960 adult inmates",
    "Research Question": "Impact of methadone maintenance on recidivism
rates and incarceration lengths",
    "Policy Implication 1": "Continuation of community-started opioid
medications for inmates",
    "Policy Implication 2": "Methadone maintenance's role in reducing
recidivism rates",

```

```
    "Policy Implication 3": "Revising jail policies on medication
continuation for opioid disorders",
    "Policy Implication 4": "Integrating substance use disorder treatment
in detention centers",
    "Policy Implication 5": "Further research on post-release outcomes of
such programs",
    "Result 1": "Lower rebooking likelihood in methadone-maintained
inmates",
    "Result 2": "Longer periods in community before rebooking for
methadone group",
    "Result 3": "Differences in length of incarceration among groups",
    "Result 4": "Early evidence supporting effectiveness of methadone
maintenance in reducing recidivism",
    "Result 5": None
}
```

```
paper_data87 = {
    "Title": "Criminal justice outcomes over 5 years after
randomization to buprenorphine-naloxone or methadone treatment for opioid
use disorder",
    "Year": 2019,
    "Journal": "Addiction",
    "Methodology": "5-year follow-up study",
    "Research Question": "Long-term criminal justice outcomes among
opioid-dependent individuals randomized to buprenorphine or methadone",
    "Policy Implication 1": "Treatment with buprenorphine or
methadone superior to no pharmacotherapy in reducing criminal justice
outcomes",
    "Policy Implication 2": "Focus on public health efforts to
prevent/mitigate criminal justice consequences, especially for
disproportionately impacted groups",
    "Policy Implication 3": "Enhance delivery and outcomes of
pharmacotherapy in US criminal justice settings",
    "Policy Implication 4": "Need to understand characteristics and
predictors of medication change impacts on criminal justice outcomes",
    "Policy Implication 5": None,
    "Result 1": "No significant difference in arrests or
incarcerations between buprenorphine and methadone treatments over 5
years",
    "Result 2": "Lower likelihood of arrest or incarceration with
buprenorphine or methadone treatment compared to no treatment",
    "Result 3": "Less likelihood of arrest with methadone treatment
among methadone-randomized individuals",
    "Result 4": "Less likelihood of arrest with buprenorphine
treatment among buprenorphine-randomized individuals",
    "Result 5": "Arrest likelihood negatively associated with older
age; positively with Hispanic ethnicity, cocaine use, injection drug use"
}
```

```
paper_data88 = {
```

```

    "Title": "Does exposure to opioid substitution treatment in prison
reduce the risk of death after release? A national prospective
observational study in England",
    "Year": 2017,
    "Journal": "Addiction",
    "Methodology": "National prospective observational study",
    "Research Question": "Does exposure to opioid substitution treatment
in prison reduce the risk of death after release in England?",
    "Policy Implication 1": "Opioid substitution treatment (OST) in
prison settings significantly reduces the risk of death post-release,
emphasizing the importance of such interventions.",
    "Policy Implication 2": "Continued support and monitoring post-
release are crucial, as the protective effects of OST are not observed
after the first month following release.",
    "Policy Implication 3": "The need for integrated healthcare services
that encompass both prison and community settings to ensure continuity of
care.",
    "Policy Implication 4": "Targeted strategies to facilitate the
transition from prison-based OST to community drug misuse treatment.",
    "Policy Implication 5": None,
    "Result 1": "OST was associated with a 75% reduction in all-cause
mortality and an 85% reduction in drug-related poisoning mortality in the
first month post-release.",
    "Result 2": "No significant difference in the risk of all-cause
mortality or drug-related poisoning mortality after the first month.",
    "Result 3": "OST exposed group more likely to enter community-based
drug misuse treatment within the first month post-release.",
    "Result 4": "OST plays a crucial role in reducing immediate post-
release mortality risks among prisoners with opioid use disorder.",
    "Result 5": "The absence of a protective effect of OST after the
first month suggests the need for sustained post-release interventions."
}

```

```

paper_data89 = {
    "Title": "Effectiveness of medication assisted treatment for opioid
use in prison and jail settings: A meta-analysis and systematic review",
    "Year": 2019,
    "Journal": "Journal of Substance Abuse Treatment",
    "Methodology": "Meta-analysis and systematic review",
    "Research Question": "Does medication assisted treatment (MAT) in
prison and jail settings affect community substance use treatment
engagement, opioid use, recidivism, and health risk behaviors after
release?",
    "Policy Implication 1": "Supports the use of MAT in correctional
settings, particularly for improving community substance use treatment
engagement and reducing opioid use post-release.",
    "Policy Implication 2": "Highlights the need for more research to
understand MAT's impact on reducing recidivism and other health risk
behaviors.",
    "Policy Implication 3": None,
    "Policy Implication 4": None,
    "Policy Implication 5": None,
}

```

```
    "Result 1": "Methadone during incarceration increased community
treatment engagement and reduced illicit opioid and injection drug use.",
    "Result 2": "Methadone did not significantly reduce recidivism.",
    "Result 3": "Buprenorphine and naltrexone were either superior to
methadone or as effective in reducing illicit opioid use post-release.",
    "Result 4": None,
    "Result 5": None
}
```

```
paper_data90 = {
  "Title": "Effect of prison-based opioid substitution treatment and
post-release retention in treatment on risk of re-incarceration",
  "Year": 2012,
  "Journal": "Addiction",
  "Methodology": "Longitudinal cohort study",
  "Research Question": "Does opioid substitution treatment (OST) in
prison and after release affect the risk of re-incarceration?",
  "Policy Implication 1": "Implementing OST in prison settings and
ensuring post-release retention in treatment can significantly reduce re-
incarceration rates.",
  "Policy Implication 2": "Need for a focused approach on post-release
OST to sustain the reduction in re-incarceration risk.",
  "Policy Implication 3": None,
  "Policy Implication 4": None,
  "Policy Implication 5": None,
  "Result 1": "90% of participants were re-incarcerated after their
first release during the study period.",
  "Result 2": "Being in OST at the time of release from prison did not
significantly affect re-incarceration.",
  "Result 3": "Post-release retention in OST reduced the average risk
of re-incarceration by 20%.",
  "Result 4": None,
  "Result 5": None
}
```

```
paper_data91 = {
  "Title": "Extended-Release Naltrexone to Prevent Opioid Relapse in
Criminal Justice Offenders",
  "Year": 2016,
  "Journal": "The New England Journal of Medicine",
  "Methodology": "Five-site open-label randomized trial",
  "Research Question": "Does extended-release naltrexone prevent opioid
relapse among adult criminal justice offenders with a history of opioid
dependence?",
  "Policy Implication 1": "Extended-release naltrexone can be an
effective intervention to reduce opioid relapse among criminal justice
offenders.",
  "Policy Implication 2": "The need for sustained intervention
strategies post-treatment to maintain the prevention effects on opioid
use.",
  "Policy Implication 3": None,
}
```

```
    "Policy Implication 4": None,
    "Policy Implication 5": None,
    "Result 1": "Extended-release naltrexone resulted in a lower rate of
opioid relapse compared to usual treatment.",
    "Result 2": "No significant difference in rates of other secondary
outcomes like cocaine, alcohol, and intravenous drug use, or
reincarceration.",
    "Result 3": "Opioid-use prevention effects waned after treatment
discontinuation.",
    "Result 4": None,
    "Result 5": None
}
```

```
paper_data92 = {
  "Title": "Impact of opioid substitution therapy for Scotland's
prisoners on drug-related deaths soon after prisoner release",
  "Year": 2015,
  "Journal": "Addiction",
  "Methodology": "Retrospective cohort study",
  "Research Question": "Was the introduction of prison-based opioid
substitution therapy (OST) associated with a reduction in drug-related
deaths soon after prisoner release?",
  "Policy Implication 1": "The introduction of OST in Scottish prisons
did not appreciably reduce the percentage of drug-related deaths
occurring in the first 2 weeks after release.",
  "Policy Implication 2": "Further consideration is needed for the
reduced tolerance for opioids during imprisonment and high-risk behaviors
after release.",
  "Policy Implication 3": "Provision of OST in prisons is justified by
parity of health care and its contribution to reducing in-prison deaths,
including suicide.",
  "Policy Implication 4": "Need for more targeted interventions at the
time of release, such as naloxone-on-release, to reduce early drug-
related deaths.",
  "Policy Implication 5": None,
  "Result 1": "The drug-related death rate in the first 12 weeks post-
release fell significantly from 3.8 per 1000 releases to 2.2 per 1000
after the introduction of OST.",
  "Result 2": "No significant change in the proportion of drug-related
deaths in the first 14 days after release.",
  "Result 3": None,
  "Result 4": None,
  "Result 5": None
}
```

```
paper_data93 = {
  "Title": "Medication-Assisted Treatment in Criminal Justice Agencies
Affiliated with the Criminal Justice-Drug Abuse Treatment Studies:
Availability, Barriers, and Intentions",
  "Year": 2012,
  "Journal": "Substance Abuse",
  "Methodology": "Survey of criminal justice agencies",
}
```

"Research Question": "What is the use of Medication-Assisted Treatment (MAT) in criminal justice settings and what factors influence its use?",

"Policy Implication 1": "Address inadequate knowledge and negative attitudes about MAT to increase its adoption in criminal justice settings.",

"Policy Implication 2": "Better linkages to community pharmacotherapy during the reentry period might overcome issues including security, liability, staffing, and regulatory concerns.",

"Policy Implication 3": "Facilitate expansion of MAT to serve other alcohol- and opioid-dependent criminal justice populations.",

"Policy Implication 4": "Increased collaboration with community MAT providers is required for expansion in community correctional settings.",

"Policy Implication 5": "Target funding and resources toward the preferential use of evidence-based treatment modalities such as MAT.",

"Result 1": "MAT use is largely limited to detoxification and maintenance of pregnant women in criminal justice settings.",

"Result 2": "Use of MAT during the community reentry period is minimal.",

"Result 3": "Approximately three-quarters of jails and prisons provide opioid pharmacotherapy for pregnant inmates and 60% for opioid withdrawal management.",

"Result 4": "Major barriers to MAT use include security concerns, regulatory restrictions, lack of qualified staff, and negative attitudes towards MAT.",

"Result 5": "MAT remains stigmatized and under-resourced in correctional settings."

}

paper_data94 = {

"Title": "Medication-Assisted Treatment in US Drug Courts: Results from a Nationwide Survey of Availability, Barriers, and Attitudes",

"Year": 2013,

"Journal": "Journal of Substance Abuse Treatment",

"Methodology": "Nationwide survey",

"Research Question": "What is the availability of and barriers to Medication-Assisted Treatment (MAT) for opioid addiction in US drug courts?",

"Policy Implication 1": "Substantial targeted educational initiative is needed to increase awareness of the treatment and criminal justice benefits of MAT.",

"Policy Implication 2": "Addressing misconceptions and ambivalence about MAT's effectiveness is crucial for its wider adoption.",

"Policy Implication 3": "Improve education efforts directed at both drug court personnel and policy makers about evidence-based treatment approaches.",

"Policy Implication 4": "Introduce or expand the use of MAT where evidence shows improved outcomes for participants.",

"Policy Implication 5": None,

"Result 1": "47% of drug courts offered agonist medication (56% for all MAT including naltrexone).",

```
"Result 2": "Major barriers to MAT availability included cost, court
policy, lack of providers, and concerns about diversion.",
"Result 3": "Significant uncertainty and negative attitudes toward
MAT among non-MAT providing courts.",
"Result 4": "MAT's use is inconsistent due to political, judicial,
and administrative opposition.",
"Result 5": "MAT has limited penetration in drug courts despite
evidence of its efficacy."
}
```

```
paper_data95 = {
  "Title": "Mortality After Prison Release: Opioid Overdose and Other
Causes of Death, Risk Factors and Time Trends From 1999 to 2009",
  "Year": 2013,
  "Journal": "Annals of Internal Medicine",
  "Methodology": "Cohort study",
  "Research Question": "What are the postrelease mortality rates and
risk factors for death, particularly from drug overdose, among former
prisoners?",
  "Policy Implication 1": "Interventions to reduce drug overdose,
especially from pharmaceutical opioids, should be included for released
prisoners.",
  "Policy Implication 2": "Need for improved overdose education,
monitoring for medication problems, and drug treatment in prison and
community settings.",
  "Policy Implication 3": "Consider the overdose risks associated with
the transition from prison to the community, especially for drug-
dependent individuals.",
  "Policy Implication 4": "Provide broader access to evidence-based
opioid dependence treatments like methadone or buprenorphine in prison
and after release.",
  "Policy Implication 5": "Incorporate former prisoners into broader
strategic efforts to reduce overdose from pharmaceutical opioids.",
  "Result 1": "Drug overdose, especially from pharmaceutical opioids,
was the leading cause of death after prison release.",
  "Result 2": "Women had a higher risk for overdose and opioid-related
death than men.",
  "Result 3": "Opioids were involved in 14.8% of all deaths, and
overdose deaths in former prisoners accounted for 8.3% of the overdose
deaths in Washington from 2000 to 2009.",
  "Result 4": "Multiple substances, often in conjunction with opioids,
were involved in more than half of substance-related deaths.",
  "Result 5": "Former prisoners are at increased risk for death,
particularly from drug-related causes, in the early postrelease period."
}
```

```
paper_data96 = {
  "Title": "National record linkage study of mortality for a large
cohort of opioid users ascertained by drug treatment or criminal justice
sources in England 2005-2009",
  "Year": 2015,
```



```
"Journal": "Drug and Alcohol Dependence",
"Methodology": "National record linkage study",
"Research Question": "Does excess mortality change with age in opioid
users, and what are the causes of death?",
"Policy Implication 1": "The need for targeted health care, public
health, and policy efforts to reduce death risk after release from
prison.",
"Policy Implication 2": "Former prisoners should be included in
broader strategic efforts to reduce overdose, particularly from
pharmaceutical opioids.",
"Policy Implication 3": "Address elevated risks for main causes of
death among opioid users, including drug-related poisonings, infectious
diseases, and liver-related diseases.",
"Policy Implication 4": "Consider the impact of ageing on health
inequalities and mortality risk in opioid users.",
"Policy Implication 5": None,
"Result 1": "Drug-related poisonings accounted for 43% of deaths
among opioid users.",
"Result 2": "All-cause mortality was highly elevated (SMR 5.7)
compared to the general population.",
"Result 3": "Significant age-related increase in drug-related
poisoning mortality risk beyond 45 years.",
"Result 4": "Health inequalities persist with increasing age and for
some disease causes widen.",
"Result 5": "Increased Standardized Mortality Ratios (SMRs) for
specific causes of death, including infectious diseases and liver-related
diseases."
}
```

```
paper_data97 = {
  "Title": "Only One In Twenty Justice-Referred Adults In Specialty
Treatment For Opioid Use Receive Methadone Or Buprenorphine",
  "Year": 2017,
  "Journal": "Health Affairs",
  "Methodology": "Analysis of data from the Treatment Episode Data Set-
Admissions (TEDS-A)",
  "Research Question": "Does the criminal justice system refer people
to the highest standard of opioid use disorder treatment, specifically
methadone or buprenorphine?",
  "Policy Implication 1": "Significant improvement needed in referring
justice-involved individuals to evidence-based opioid agonist
treatments.",
  "Policy Implication 2": "Educational and policy interventions
required to address underuse of agonist treatments in criminal justice
settings.",
  "Policy Implication 3": "Training for correctional staff and judges
on the effectiveness and safety of opioid agonist treatments.",
  "Policy Implication 4": "Implementation of policies ensuring access
to agonist treatment for justice-involved individuals.",
  "Policy Implication 5": "Encouraging the adoption of pharmacotherapy
for substance use disorders within the criminal justice system.",
}
```

```
"Result 1": "Only 4.6% of justice-referred clients received agonist
treatment compared to 40.9% referred by other sources.",
"Result 2": "Justice-referred individuals are substantially less
likely to receive agonist medications.",
"Result 3": "Courts and diversionary programs are least likely to
refer people to agonist treatment.",
"Result 4": "Referral by a criminal justice entity reduces the odds
of receiving agonist treatment by over 90%.",
"Result 5": "The underuse of agonist treatment in criminal justice
settings contributes to low levels in specialty treatment settings."
}
```

```
paper_data98 = {
  "Title": "Opioid-related treatment interventions and outcomes among
incarcerated persons: A systematic review",
  "Year": 2019,
  "Journal": "PLOS Medicine",
  "Methodology": "Systematic review of eight electronic databases",
  "Research Question": "What are the opioid-related treatment
interventions and outcomes among incarcerated persons?",
  "Policy Implication 1": "Correctional facilities should scale up
opioid agonist treatment (OAT) among incarcerated persons with opioid use
disorder (OUD).",
  "Policy Implication 2": "Implement immediate OAT after prison release
and additional preventive strategies such as the distribution of naloxone
kits.",
  "Policy Implication 3": "Mitigate the impact of the opioid-related
overdose crisis by scaling up OAT and overdose prevention strategies.",
  "Policy Implication 4": "Incorporate a continuum of OAT and overdose
prevention treatment before, during, and after incarceration.",
  "Policy Implication 5": None,
  "Result 1": "OAT likely decreases opioid-related overdose and
mortality, reduces opioid use and other risky behaviors during and after
incarceration.",
  "Result 2": "Improved retention in addiction treatment after prison
release with OAT.",
  "Result 3": "Immediate OAT after release and naloxone distribution
greatly decrease opioid-related overdose and mortality.",
  "Result 4": None,
  "Result 5": None
}
```

```
paper_data99 = {
  "Title": "Postincarceration Fatal Overdoses After Implementing
Medications for Addiction Treatment in a Statewide Correctional System",
  "Year": 2018,
  "Journal": "JAMA Psychiatry",
  "Methodology": "Retrospective cohort analysis",
  "Research Question": "What is the impact of implementing Medications
for Addiction Treatment (MAT) in a statewide correctional system on
postincarceration fatal overdoses?",
```

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"Policy Implication 1": "Implementing MAT in correctional systems can
reduce overdose deaths post-incarceration.",
"Policy Implication 2": "Continued or initiated MAT in correctional
facilities is essential to address the opioid overdose epidemic.",
"Policy Implication 3": "Effective screening and protocol-led
treatment with MAT (including methadone, buprenorphine, or naltrexone) in
correctional facilities can significantly impact public health.",
"Policy Implication 4": "Broadening access to MAT in correctional
settings should be a public health priority.",
"Policy Implication 5": None,
"Result 1": "In Rhode Island, implementation of MAT in correctional
facilities was associated with a reduction in overdose deaths from 179 in
the first half of 2016 to 157 in the same period of 2017.",
"Result 2": "The study highlights the potential of MAT programs in
reducing opioid-related mortality among recently incarcerated
individuals.",
"Result 3": None,
"Result 4": None,
"Result 5": None
}
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```
paper_data100 = {
  "Title": "State criminal justice policy context and opioid agonist
treatment delivery among opioid treatment admissions 2015",
  "Year": 2020,
  "Journal": "Drug and Alcohol Dependence",
  "Methodology": "Analysis of 2015 Treatment Episode Data Set-
Admissions (TEDS-A)",
  "Research Question": "Does state-level criminal justice involvement
in the substance use treatment system affect the provision of opioid
agonist treatment (OAT)?",
  "Policy Implication 1": "Interventions should be targeted to increase
access to OAT in states with high criminal justice involvement in opioid
treatment.",
  "Policy Implication 2": "Need to address the reduced likelihood of
receiving OAT for individuals referred to treatment through the criminal
justice system.",
  "Policy Implication 3": None,
  "Policy Implication 4": None,
  "Policy Implication 5": None,
  "Result 1": "Criminal justice referral to treatment was associated
with an 85% reduction in the odds of receiving OAT compared to other
sources of referral.",
  "Result 2": "In states with high criminal justice involvement, the
odds of receiving OAT were 63% lower compared to states with low criminal
justice involvement.",
  "Result 3": None,
  "Result 4": None,
  "Result 5": None
}
```

```
paper_data101 = {
```

```

    "Title": "The costs of crime during and after publicly funded
treatment for opioid use disorders: a population-level study for the
state of California",
    "Year": 2017,
    "Journal": "Addiction",
    "Methodology": "Retrospective administrative data-based cohort
study",
    "Research Question": "What are the costs of crime during and after
periods of engagement in publicly funded treatment for opioid use
disorders?",
    "Policy Implication 1": "Treatment for OUD is associated with
significant reductions in the costs of crime, highlighting the economic
benefits of treatment.",
    "Policy Implication 2": "Greater economic benefits are observed for
individuals receiving time-unlimited opioid agonist treatment compared to
detoxification.",
    "Policy Implication 3": None,
    "Policy Implication 4": None,
    "Policy Implication 5": None,
    "Result 1": "Daily costs of crime during treatment compared to after
treatment were $126 lower for OAT and $144 lower for detoxification.",
    "Result 2": "Enrolling an individual in OAT instead of detoxification
would save an estimated $17,550 over a 6-month period.",
    "Result 3": None,
    "Result 4": None,
    "Result 5": None
}

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```

paper_data102 = {
    'Title': 'The Economic Burden of Prescription Opioid Overdose, Abuse,
and Dependence in the United States 2013',
    'Year': 2016,
    'Journal': 'Medical Care',
    'Methodology': 'Analysis of various data sources including National
Vital Statistics System, National Survey of Drug Use and Health, health
care claims data, etc.',
    'Research Question': 'Economic burden of prescription opioid
overdose, abuse, and dependence from a societal perspective',
    'Policy Implication 1': 'Total economic burden estimated at $78.5
billion',
    'Policy Implication 2': 'Over one-third of the cost due to increased
health care and substance abuse treatment costs ($28.9 billion)',
    'Policy Implication 3': 'Approximately one-quarter of the cost borne
by the public sector',
    'Policy Implication 4': 'Significant portion of economic burden on
government',
    'Policy Implication 5': 'Large and statistically significant cost
differences across insurance types',
    # Detailed results from the paper
    'Result 1': 'Prevalence of prescription opioid abuse and dependence:
Approximately 1.935 million people',

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'Result 2': 'Number of fatal overdoses from prescription opioids:
16,235 deaths',
'Result 3': 'Health care cost increase for patients diagnosed with
opioid abuse or dependence: Over $17000 for Medicare, $15500 for private
insurance, over $13700 for Medicaid',
'Result 4': 'Total nonfatal costs: $56,990 million',
'Result 5': 'Total fatal costs: $21,513 million'
}
```

```
paper_data103 = {
  'Title': 'The Effectiveness of Opioid Maintenance Treatment in Prison
Settings: A Systematic Review',
  'Year': 'Unknown', # Year not specified in the provided excerpt
  'Journal': 'Unknown', # Journal name not specified in the provided
excerpt
  'Methodology': 'Systematic review of experimental and observational
studies',
  'Research Question': 'Effectiveness of opioid maintenance treatment
in prison and post-release settings',
  'Policy Implication 1': 'Reduced heroin use and risk behaviors in
prison with adequate doses of OMT',
  'Policy Implication 2': 'Increased treatment entry and retention
post-release with pre-release OMT',
  'Policy Implication 3': 'Reductions in heroin use post-release',
  'Policy Implication 4': 'Equivocal evidence on impact on crime and
re-incarceration',
  'Policy Implication 5': 'Limited evidence on reducing post-release
mortality',
  # Summarized qualitative results based on the abstract
  'Result 1': 'Significant reduction in heroin use, injecting, and
syringe-sharing in prison with adequate OMT doses',
  'Result 2': 'Increased treatment entry and retention post-release
with pre-release OMT',
  'Result 3': 'Reductions in heroin use post-release observed in four
out of five studies',
  'Result 4': 'Equivocal evidence regarding the impact of OMT on crime
and re-incarceration rates',
  'Result 5': 'Limited evidence suggesting pre-release OMT reduces
post-release mortality'
}
```

```
paper_data104 = {
  'Title': 'The Hidden Costs of the Opioid Crisis and the Implications
for Financial Management in the Public Sector',
  'Year': 2019,
  'Journal': 'Forensic Science International: Synergy',
  'Methodology': 'Analysis of expenditure data from various
laboratories and criminal justice system components',
  'Research Question': 'Financial implications of the opioid crisis on
the public sector',
  'Policy Implication 1': 'Total opioid expenditures estimated at
$270,281,133',
}
```

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    'Policy Implication 2': 'Cost distribution among various types of
laboratories',
    'Policy Implication 3': 'Specific cost areas: Drugs-Controlled
Substances, Toxicology, and Other Investigations',
    'Policy Implication 4': 'Economic incentive highlighted for
addressing the opioid crisis',
    'Policy Implication 5': 'Immediate need for increased funding for
forensic crime laboratories',
    # Results from the paper
    'Result 1': 'Total Expenditures on Drugs-Controlled Substances:
$73,291,569',
    'Result 2': 'Total Expenditures on Toxicology: $81,469,912',
    'Result 3': 'Total Expenditures on Other Areas of Investigation:
$115,519,652',
    'Result 4': 'Annual cost growth identified in forensic crime
laboratory expenditures',
    'Result 5': 'Economic burden on forensic crime laboratories due to
opioid crisis'
}

```

```

additional_paper_data4=[
    paper_data85, paper_data86, paper_data87, paper_data88, paper_data89,
    paper_data90, paper_data91, paper_data92, paper_data93, paper_data94,
    paper_data95, paper_data96, paper_data97, paper_data98, paper_data99,
    paper_data100, paper_data101, paper_data102, paper_data103,
    paper_data104
]

```

```

# Convert each paper's data into a DataFrame
all_papers_df4 = pd.concat([pd.DataFrame([data]) for data in
additional_paper_data4], ignore_index=True)

```

```

# Define the file path
file_path = r'C:\Users\Mengyang\Desktop\Criminal.xlsx' # Replace
'my_excel_file.xlsx' with your desired file name

```

```

# Save the DataFrame to an Excel file
all_papers_df4.to_excel(file_path, index=False)

```

```

#Naloxone

```

```

paper_data105 = {
    'Title': 'Acceptability of Naloxone Co-Prescription Among Primary
Care Providers Treating Patients on Long-Term Opioid Therapy for Pain',
    'Year': 2016,
    'Journal': 'Journal of General Internal Medicine',
    'Methodology': 'Survey of providers at six safety-net primary care
clinics',
    'Research Question': 'Explore naloxone co-prescribing acceptability
among primary care providers',
    'Policy Implication 1': 'High acceptability for naloxone co-
prescription (79.3% of providers prescribed)',

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    'Policy Implication 2': 'Future prescribing intentions high (99.1%
likely to prescribe in future)',
    'Policy Implication 3': 'Willingness to prescribe to various patient
groups',
    'Policy Implication 4': 'Impact on opioid prescribing (22.5% might
prescribe fewer opioids)',
    'Policy Implication 5': 'Barriers to prescribing naloxone are largely
administrative',
    # Results from the paper
    'Result 1': 'Most providers prescribed naloxone to an average of 7.7
patients',
    'Result 2': 'Likely to prescribe naloxone to patients on low doses,
elderly patients, those with no overdose history, and without substance
use disorder',
    'Result 3': 'Majority felt that prescribing naloxone did not affect
their opioid prescribing',
    'Result 4': 'Administrative concerns were the main barriers to
prescribing naloxone',
    'Result 5': 'Providers with more experience or patients on opioid
therapy were more likely to prescribe naloxone'
}

```

```

paper_data106 = {
    'Title': 'Are Take-Home Naloxone Programmes Effective? Systematic
Review Utilizing Application of the Bradford Hill Criteria',
    'Year': 2016,
    'Journal': 'Unknown', # Journal name not specified in the provided
excerpt
    'Methodology': 'Systematic review of peer-reviewed publications',
    'Research Question': 'Effectiveness of take-home naloxone in reducing
overdose mortality and assessing safety',
    'Policy Implication 1': 'Reduction in overdose mortality',
    'Policy Implication 2': 'Low rate of adverse events',
    'Policy Implication 3': 'Cost-effectiveness of take-home naloxone',
    'Policy Implication 4': 'Successful implementation in various
settings',
    'Policy Implication 5': 'Unanticipated benefits reported in some
programs',
    # Results from the paper
    'Result 1': '2336 take-home naloxone administrations with a low fatal
outcome rate',
    'Result 2': 'Naloxone usage rates between 5% and 63% in various
locations',
    'Result 3': 'Rapid expansion of THN kits in locations like San
Francisco',
    'Result 4': '25% of participants in San Francisco entered treatment
within 6-month follow-up',
    'Result 5': 'Successful implementation in special populations with
high risk of overdose'
}

```

```

paper_data107 = {
  'Title': 'Association of Naloxone Coprescription Laws With Naloxone
Prescription Dispensing in the United States',
  'Year': 2019,
  'Journal': 'JAMA Network Open',
  'Methodology': 'Population-based state-level cohort study using data
from retail pharmacies',
  'Research Question': 'Association between naloxone coprescription
legal mandates and naloxone dispensing',
  'Policy Implication 1': 'Significant increase in naloxone dispensing
rates after legal mandates',
  'Policy Implication 2': 'Notable increase in naloxone dispensing in
Virginia and Vermont',
  'Policy Implication 3': 'Lower naloxone dispensing rates in states
without mandated prescribing',
  'Policy Implication 4': 'Association of naloxone access laws with
reduction in opioid overdose deaths',
  'Policy Implication 5': 'Study limitations include short-term
assessment and exclusion of free community-distributed naloxone',
  # Results from the paper
  'Result 1': '88 naloxone prescriptions per 100,000 dispensed in
Virginia and 111 in Vermont in first month of mandate',
  'Result 2': 'Decrease in naloxone dispensing rates in last quarter of
2017 in Virginia and Vermont',
  'Result 3': 'Mean increase of 37% in naloxone dispensing associated
with third-party prescribing or standing order laws',
  'Result 4': 'Positive association between naloxone dispensing and
opioid overdose death rates',
  'Result 5': 'Increased naloxone access as a potential intermediate
step for reducing rate of opioid overdose deaths'
}

```

```

paper_data108 = {
  'Title': 'Availability and Cost of Naloxone Nasal Spray at Pharmacies
in Philadelphia, Pennsylvania 2017',
  'Year': 2019,
  'Journal': 'JAMA Network Open',
  'Methodology': 'Survey study of pharmacies in Philadelphia',
  'Research Question': 'Availability and cost of naloxone nasal spray
in Philadelphia pharmacies',
  'Policy Implication 1': 'Limited availability in pharmacies (only
one-third carried naloxone)',
  'Policy Implication 2': 'Differences in availability by pharmacy
type',
  'Policy Implication 3': 'Less availability in neighborhoods with very
elevated opioid overdose death rates',
  'Policy Implication 4': 'Median out-of-pocket cost for naloxone was
$145',
  'Policy Implication 5': 'Need for strengthened implementation of
naloxone access laws',
  # Results from the paper
  'Result 1': '34.2% of pharmacies had naloxone nasal spray in stock',

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'Result 2': 'Naloxone more likely to be in stock in chain stores
(45.9%) than in independent stores (27.8%)',
'Result 3': 'Naloxone less likely to be available in predominantly
minority neighborhoods',
'Result 4': 'Higher out-of-pocket costs in independent pharmacies and
high-overdose neighborhoods',
'Result 5': 'Efforts needed to strengthen naloxone supply, especially
in high overdose death areas'
}
```

```
paper_data109 = {
  'Title': 'Availability of Buprenorphine/Naloxone Films and Naloxone
Nasal Spray in Community Pharmacies in Texas, USA',
  'Year': 'Unknown', # Year not specified in the provided excerpt
  'Journal': 'Unknown', # Journal name not specified in the provided
excerpt
  'Methodology': 'Cross-sectional telephone audit with secret shopper
approach',
  'Research Question': 'Availability of BUP/NX and NNS in Texas
pharmacies by type and metropolitan status',
  'Policy Implication 1': 'Limited availability in pharmacies for
BUP/NX and NNS',
  'Policy Implication 2': 'Disparities in availability by pharmacy
type',
  'Policy Implication 3': 'Challenges in dispensing medications on
demand',
  'Policy Implication 4': 'Need for improved access, especially in
independent pharmacies',
  # Results from the paper
  'Result 1': '34.1% of pharmacies able to dispense BUP/NX and NNS',
  'Result 2': 'Independent pharmacies less likely to have medications
available',
  'Result 3': 'Most Texas pharmacies unprepared to dispense on demand',
  'Result 4': 'Deficiencies more pronounced in independent pharmacies',
  'Result 5': 'Recommendations for interventions to increase pharmacy
availability'
}
```

```
paper_data110 = {
  'Title': 'Community-Based Opioid Overdose Prevention Programs
Providing Naloxone – United States, 2010',
  'Year': 2012,
  'Journal': 'MMWR Morb Mortal Wkly Rep',
  'Methodology': 'Survey of community-based programs',
  'Research Question': 'Assessment of naloxone distribution and
overdose reversals by community-based programs',
  'Policy Implication 1': 'Steady increase in drug overdose deaths
involving opioids and other drugs',
  'Policy Implication 2': 'Increasing provision of naloxone by
community programs',
}
```

```

    'Policy Implication 3': 'Over 10,000 reported overdose reversals
involving naloxone',
    'Policy Implication 4': 'Difficulties in obtaining naloxone reported
by programs',
    'Policy Implication 5': 'Potential underreporting of naloxone
distribution and overdose reversals',
    # Results from the paper
    'Result 1': '53,032 persons trained and provided with naloxone',
    'Result 2': '10,171 overdose reversals reported using naloxone',
    'Result 3': '43.7% of programs faced challenges in obtaining
naloxone',
    'Result 4': 'Main issues: cost of naloxone and inability of suppliers
to fill orders',
    'Result 5': 'Limitations in data collection and possible
underreporting of outcomes'
}

```

```

paper_data111 = {
    'Title': 'Cost-Effectiveness of Distributing Naloxone to Heroin Users
for Lay Overdose Reversal',
    'Year': 2013,
    'Journal': 'Annals of Internal Medicine',
    'Methodology': 'Cost-effectiveness analysis',
    'Research Question': 'Estimating the cost-effectiveness of naloxone
distribution to heroin users for overdose reversal',
    'Policy Implication 1': 'Prevented 6% of overdose deaths',
    'Policy Implication 2': 'One death prevented per 227 naloxone kits
distributed',
    'Policy Implication 3': 'ICER of $438 per QALY',
    'Policy Implication 4': 'Cost-effective across various sensitivity
analyses',
    'Policy Implication 5': 'Useful public health intervention',
    # Results from the paper
    'Result 1': '6% of overdose deaths prevented with naloxone
distribution',
    'Result 2': 'One death prevented for every 227 naloxone kits
distributed',
    'Result 3': 'Increased costs by $53 with an increase in QALYs by
0.119',
    'Result 4': 'Cost-effective in all sensitivity analyses',
    'Result 5': 'Cost-saving in scenarios with fewer overdoses or EMS
activations'
}

```

```

paper_data112 = {
    'Title': 'Development of Opioid Overdose Knowledge (OOKS) and
Attitudes (OoAS) Scales for Take-Home Naloxone Training Evaluation',
    'Year': 2013,
    'Journal': 'Unknown', # Journal name not specified in the provided
excerpt
    'Methodology': 'Psychometric instrument development study',
    'Research Question': 'Development of OOKS and OoAS for take-home
naloxone training evaluation',
}

```

```

    'Policy Implication 1': 'Development of OOKS and OOAS with multiple
sub-scales',
    'Policy Implication 2': 'Internal reliability and test-retest
reliability established',
    'Policy Implication 3': 'Scales suitable for measuring naloxone
training outcomes',
    'Policy Implication 4': 'Positive correlation of OOKS with Overdose
Recognition',
    'Policy Implication 5': 'OOAS not associated with General Self-
Efficacy',
    # Results from the paper
    'Result 1': 'OOKS and OOAS developed for naloxone training
evaluation',
    'Result 2': 'Cronbach's alpha of 0.83 for OOKS and 0.90 for OOAS',
    'Result 3': 'OOKS positively correlated with overdose recognition
skills',
    'Result 4': 'OOAS not associated with general self-efficacy',
    'Result 5': 'Scales provide a structured way to evaluate naloxone
training'
}

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```

paper_data113 = {
    'Title': 'Distinguishing Signs of Opioid Overdose and Indication for
Naloxone: An Evaluation of Six Overdose Training and Naloxone
Distribution Programs in the United States',
    'Year': 'Unknown', # Year not specified in the provided excerpt
    'Journal': 'Unknown', # Journal name not specified in the provided
excerpt
    'Methodology': 'Assessment of overdose and naloxone administration
knowledge among opioid abusers',
    'Research Question': 'Effectiveness of training in overdose
recognition and response among opioid users',
    'Policy Implication 1': 'Increased overdose recognition accuracy in
trained participants',
    'Policy Implication 2': 'Improved accuracy in naloxone indication
among trained participants',
    'Policy Implication 3': 'Link between training, competency, and
overdose recognition',
    'Policy Implication 4': 'Skill level of trained respondents
comparable to medical experts',
    'Policy Implication 5': 'Training and confidence in abilities can
prevent overdose mortality',
    # Results from the paper
    'Result 1': 'Trained participants recognized more opioid overdose
scenarios accurately',
    'Result 2': 'Trained participants more accurately identified when
naloxone was indicated',
    'Result 3': 'Training and perceived competency associated with higher
overdose recognition scores',
    'Result 4': 'Trained respondents matched skills of medical experts in
overdose recognition and naloxone indication',
    'Result 5': 'Effective prevention of overdose mortality through
training and confidence in response abilities'
}

```

```
}
```

```
paper_data114 = {  
  'Title': 'Distinguishing Signs of Opioid Overdose and Indication for  
Naloxone: An Evaluation of Six Overdose Training and Naloxone  
Distribution Programs in the United States',  
  'Year': 'Unknown', # Year not specified in the provided excerpt  
  'Journal': 'Unknown', # Journal name not specified in the provided  
excerpt  
  'Methodology': 'Assessment of overdose and naloxone administration  
knowledge among opioid abusers',  
  'Research Question': 'Effectiveness of training in overdose  
recognition and response among opioid users',  
  'Policy Implication 1': 'Increased overdose recognition accuracy in  
trained participants',  
  'Policy Implication 2': 'Improved accuracy in naloxone indication  
among trained participants',  
  'Policy Implication 3': 'Link between training, competency, and  
overdose recognition',  
  'Policy Implication 4': 'Skill level of trained respondents  
comparable to medical experts',  
  'Policy Implication 5': 'Training and confidence in abilities can  
prevent overdose mortality',  
  # Results from the paper  
  'Result 1': 'Trained participants recognized more opioid overdose  
scenarios accurately',  
  'Result 2': 'Trained participants more accurately identified when  
naloxone was indicated',  
  'Result 3': 'Training and perceived competency associated with higher  
overdose recognition scores',  
  'Result 4': 'Trained respondents matched skills of medical experts in  
overdose recognition and naloxone indication',  
  'Result 5': 'Effective prevention of overdose mortality through  
training and confidence in response abilities'  
}
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```
paper_data115 = {  
  'Title': 'EMS Naloxone Administration as Non-Fatal Opioid Overdose  
Surveillance: 6-Year Outcomes in Marion County Indiana',  
  'Year': 'Unknown', # Year not specified in the provided excerpt  
  'Journal': 'Unknown', # Journal name not specified in the provided  
excerpt  
  'Methodology': 'Retrospective investigation of cases where naloxone  
was used by emergency medical services',  
  'Research Question': 'Examining repeat non-fatal overdose events and  
mortality outcomes over a 6-year period',  
  'Policy Implication 1': 'Higher risk of mortality for repeat overdose  
patients',  
  'Policy Implication 2': 'Younger decedents more likely to have repeat  
events',  
  'Policy Implication 3': 'Naloxone administration as a useful overdose  
surveillance tool',  
}
```

```
'Policy Implication 4': 'Need for ongoing monitoring and
intervention',
'Policy Implication 5': 'Potential to reduce mortality through
targeted intervention',
# Results from the paper
'Result 1': '9.4% of patients administered naloxone died following
resuscitation',
'Result 2': '34.7% of decedents died of drug-related causes',
'Result 3': 'Patients with repeat non-fatal overdose events had a
higher hazard of all-cause mortality',
'Result 4': 'Increased hazard of drug-related mortality for patients
with repeat events',
'Result 5': 'Significantly higher risk of mortality among patients
with repeat non-fatal opioid overdose events'
}
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```
paper_data116 = {
'Title': 'Evaluation of Naloxone Access Pricing and Barriers to
Dispensing in Tennessee Retail Community Pharmacies',
'Year': 'Unknown', # Year not specified in the provided excerpt
'Journal': 'Unknown', # Journal name not specified in the provided
excerpt
'Methodology': 'Cross-sectional survey conducted via telephone',
'Research Question': 'Examination of naloxone availability, pricing,
and pharmacist-initiated recommendations in Tennessee pharmacies',
'Policy Implication 1': 'High availability of naloxone in
pharmacies',
'Policy Implication 2': 'Cost as a primary barrier to naloxone
dispensing',
'Policy Implication 3': 'Limited pharmacist-initiated recommendations
for naloxone',
'Policy Implication 4': 'Suggestions to increase access include
lowering costs and improving education',
'Policy Implication 5': 'Need for enhanced education and awareness
about naloxone',
# Results from the paper
'Result 1': '92.7% of pharmacies reported naloxone availability',
'Result 2': 'Average cash price of naloxone was $132.49',
'Result 3': '70.2% of respondents cited cost as a barrier to
dispensing naloxone',
'Result 4': '42.1% to 69.1% of pharmacies recommended naloxone to
high-risk patients',
'Result 5': 'Improving naloxone-related education for patients and
providers suggested as a strategy to increase access'
}
```

```
paper_data117 = {
'Title': 'Exploring the life-saving potential of naloxone: A
systematic review and descriptive meta-analysis of take-home naloxone
(THN) programmes for opioid users',
'Year': 'Unknown', # Year not specified in the provided excerpt
'Journal': 'Unknown', # Journal name not specified in the provided
excerpt
'Methodology': 'Systematic review and descriptive meta-analysis',
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```
'Research Question': 'Effect size determination for THN programmes
and rate of naloxone use assessment',
'Policy Implication 1': 'Around 9% of naloxone kits used for peer
administration within first three months per 100 PWUD trained',
'Policy Implication 2': 'Suggests efficacy of THN programmes in
naloxone administration',
'Policy Implication 3': 'Need for future evaluations of different
training structures',
'Policy Implication 4': 'Assessing impact of time on training
efficacy',
'Policy Implication 5': 'Potential contribution of THN programmes in
reducing opioid overdoses',
# Results from the paper
'Result 1': '9% use rate of naloxone kits for peer administration
within first three months per 100 PWUD trained',
'Result 2': 'Effective use of naloxone kits in THN programmes',
'Result 3': 'Highlighting the need for evaluation of training
structures',
'Result 4': 'Importance of assessing time effect on naloxone use
rate',
'Result 5': 'Potential impact of THN programmes in reducing opioid
overdoses'
}
```

```
paper_data118 = {
  "Title": "Naloxone Prescriptions Among Commercially Insured
Individuals at High Risk of Opioid Overdose",
  "Year": 2019,
  "Journal": "JAMA Network Open",
  "Methodology": "Retrospective cohort study using Truven Health
MarketScan data",
  "Research Question": "To determine the characteristics of naloxone
prescribing for US patients at high risk of opioid overdose",
  "Policy Implication 1": "Regular naloxone prescribing to eligible
patients by clinicians",
  "Policy Implication 2": "Improvement in education on screening and
treating substance use disorders",
  "Policy Implication 3": "Development of clinical protocols to
facilitate emergency department prescribing",
  "Policy Implication 4": "Support for outpatient healthcare
professionals in prescribing naloxone",
  "Policy Implication 5": "Increased funding in regions with lower
naloxone prescribing rates",
  "Result 1": "Only 1.5% of high-risk patients were prescribed
naloxone",
  "Result 2": "Patients with both opioid misuse or dependence and
overdose diagnoses were more likely to receive naloxone",
  "Result 3": "Lower likelihood of naloxone prescription in patients
aged 30-44 and in the Midwest or West regions",
  "Result 4": "Treatment for opioid use disorder increases likelihood
of receiving naloxone",
  "Result 5": "98.5% of high-risk patients did not receive naloxone
despite many healthcare interactions"
```

```
}
```

```
paper_data119 = {  
  "Title": "Nonrandomized Intervention Study of Naloxone Coprescription  
for Primary Care Patients Receiving Long-Term Opioid Therapy for Pain",  
  "Year": 2016,  
  "Journal": "Annals of Internal Medicine",  
  "Methodology": "2-year nonrandomized intervention study",  
  "Research Question": "To evaluate the feasibility and effect of  
implementing naloxone prescription to patients prescribed opioids for  
chronic pain",  
  "Policy Implication 1": "Coprescription of naloxone in primary care  
settings for patients on long-term opioid therapy",  
  "Policy Implication 2": "Prioritize naloxone prescription for  
patients on higher opioid doses or with a history of opioid-related ED  
visits",  
  "Policy Implication 3": "None",  
  "Policy Implication 4": "None",  
  "Policy Implication 5": "None",  
  "Result 1": "38.2% of patients receiving long-term opioids were  
prescribed naloxone",  
  "Result 2": "Patients with higher opioid doses or past opioid-related  
ED visits more likely to receive naloxone",  
  "Result 3": "47% fewer opioid-related ED visits per month in 6 months  
post-prescription",  
  "Result 4": "63% fewer opioid-related ED visits after 1 year of  
prescription",  
  "Result 5": "No significant change in opioid dose over time with  
naloxone prescription"  
}
```

```
paper_data120 = {  
  "Title": "Opioid overdose rates and implementation of overdose  
education and nasal naloxone distribution in Massachusetts: interrupted  
time series analysis",  
  "Year": 2013,  
  "Journal": "BMJ",  
  "Methodology": "Interrupted time series analysis",  
  "Research Question": "To evaluate the impact of state supported  
overdose education and nasal naloxone distribution (OEND) programs on  
rates of opioid related death from overdose and acute care utilization in  
Massachusetts",  
  "Policy Implication 1": "Implementation and expansion of OEND  
programs as a key strategy to address the opioid overdose epidemic",  
  "Policy Implication 2": "Use of nasal naloxone delivery devices and  
standing orders for non-medical personnel to deliver OEND",  
  "Policy Implication 3": "None",  
  "Policy Implication 4": "None",  
  "Policy Implication 5": "None",  
  "Result 1": "2912 potential bystanders trained, reporting 327  
rescues",  
  "Result 2": "Significantly reduced adjusted rate ratios for overdose  
deaths in communities with OEND implementation",  
}
```

```
"Result 3": "Stronger impact of OEND on overdose death rates with
higher cumulative enrollment rate",
"Result 4": "No significant difference in rates of acute care
hospital utilization",
"Result 5": "OEND is an effective intervention to respond to opioid
overdoses"
}
```

```
paper_data121 = {
  "Title": "Overdose Prevention and Naloxone Prescription for Opioid
Users in San Francisco",
  "Year": 2010, # Assuming year based on the document properties and
references
  "Journal": "Journal of Urban Health: Bulletin of the New York Academy
of Medicine",
  "Methodology": "Evaluation of the DOPE Project, a naloxone
prescription program",
  "Research Question": "Evaluating the impact of the DOPE Project on
naloxone use and overdose reversals among IDUs",
  "Policy Implication 1": "Provision of take-home naloxone to IDUs as
an effective intervention to reduce overdose fatalities",
  "Policy Implication 2": "Need for targeted programs in high-risk
areas with a prevalence of IDUs witnessing overdose events",
  "Policy Implication 3": "Encouraging the continuation and expansion
of naloxone prescription programs (NPPs)",
  "Policy Implication 4": "None",
  "Policy Implication 5": "None",
  "Result 1": "From 2003 to 2009, 1942 individuals were trained and
prescribed naloxone, with 24% returning for refills",
  "Result 2": "11% reported using naloxone during an overdose event",
  "Result 3": "89% of overdose events where naloxone was used were
reversed",
  "Result 4": "83% of participants attributed overdose reversal to
their administration of naloxone",
  "Result 5": "Fewer than 1% reported serious adverse effects from
naloxone use"
}
```

```
paper_data122 = {
  "Title": "Pharmacist dispensed naloxone: Knowledge availability
participation and cost in selected California counties",
  "Year": 2019, # Assuming year based on document properties
  "Journal": "International Journal of Drug Policy",
  "Methodology": "Survey of pharmacists in selected California
counties",
  "Research Question": "To determine pharmacist knowledge of AB1535,
participation, availability of naloxone, future plans for participation,
and out-of-pocket charges to consumers in selected California counties",
  "Policy Implication 1": "Need for increased participation and
availability of naloxone in pharmacies",
  "Policy Implication 2": "Addressing variability in out-of-pocket
costs for naloxone to consumers",
}
```



```
"Policy Implication 3": "Exploring reasons for low participation by pharmacists and public in naloxone programs",
"Policy Implication 4": "Potential interventions to increase naloxone availability and implementation of AB1535 statewide",
"Policy Implication 5": "None",
"Result 1": "Low participation by pharmacists in naloxone program despite high knowledge of AB1535",
"Result 2": "Low future interest in participation among pharmacists",
"Result 3": "No pharmacists in counties with highest opioid-related deaths reported dispensing naloxone under AB1535",
"Result 4": "Highly variable charges for naloxone to consumers",
"Result 5": "Potential barriers include lack of public demand and misconceptions about opioid problems in the area"
}
```

```
paper_data123 = {
  "Title": "Pharmacists' role in opioid overdose: Kentucky pharmacists' willingness to participate in naloxone dispensing",
  "Year": 2017, # Assuming year based on the document properties
  "Journal": "Journal of the American Pharmacists Association",
  "Methodology": "Electronic survey of Kentucky pharmacists' perceptions and attitudes towards naloxone dispensing",
  "Research Question": "To assess pharmacists' willingness to initiate the dispensing of naloxone under a physician-approved protocol in Kentucky",
  "Policy Implication 1": "Increasing pharmacist confidence through education to enhance participation in naloxone dispensing",
  "Policy Implication 2": "Providing resources to community pharmacies to address administrative and billing barriers",
  "Policy Implication 3": "Designing comprehensive education and training programs on naloxone dispensing and opioid overdose identification",
  "Policy Implication 4": "None",
  "Policy Implication 5": "None",
  "Result 1": "Kentucky pharmacists are divided in their willingness to initiate naloxone dispensing",
  "Result 2": "Those confident in identifying overdose risks are more willing to dispense naloxone",
  "Result 3": "The law has expanded pharmacy practice to allow greater naloxone access",
  "Result 4": "Administrative and billing complications are significant barriers to naloxone program implementation",
  "Result 5": "Educational resources and support tools are necessary to facilitate program development and implementation"
}
```

```
paper_data124 = {
  "Title": "Predicting pharmacy naloxone stocking and dispensing following a statewide standing order, Indiana 2016",
  "Year": 2018, # Assuming year based on the document properties
  "Journal": "Drug and Alcohol Dependence",
  "Methodology": "Cross-sectional census of Indiana community pharmacists with regression models",
}
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```
    "Research Question": "To identify factors associated with community
pharmacy naloxone stocking and dispensing following the enactment of a
statewide naloxone standing order",
    "Policy Implication 1": "Facilitation of naloxone stocking by chain
pharmacies with more than one full-time pharmacist",
    "Policy Implication 2": "Need for further research to understand
factors predicting pharmacist naloxone dispensing",
    "Policy Implication 3": "Importance of structural aspects and
standing order policies in naloxone access",
    "Policy Implication 4": "None",
    "Policy Implication 5": "None",
    "Result 1": "58.1% of pharmacies stocked naloxone; only 23.6% of
pharmacists dispensed it",
    "Result 2": "Chain pharmacies were 3.2 times more likely to stock
naloxone",
    "Result 3": "Naloxone stocking more likely in pharmacies with more
than one full-time pharmacist",
    "Result 4": "Pharmacies where pharmacists received naloxone education
more likely to stock naloxone",
    "Result 5": "Factors predicting naloxone dispensing remain unclear"
}
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```
paper_data125 = {
    "Title": "Preliminary effectiveness of online opioid overdose and
naloxone administration training and impact of naloxone possession on
opioid use",
    "Year": 2023,
    "Journal": "Drug and Alcohol Dependence",
    "Methodology": "Pilot clinical trial with completely remote
methodologies",
    "Research Question": "To evaluate the effectiveness of online opioid
overdose and naloxone administration education and the impact of naloxone
possession",
    "Policy Implication 1": "Effectiveness of overdose education in
online video format",
    "Policy Implication 2": "Addressing barriers to obtaining naloxone
from pharmacies",
    "Policy Implication 3": "Investigating the impact of naloxone
possession on the frequency of opioid use",
    "Policy Implication 4": "None",
    "Policy Implication 5": "None",
    "Result 1": "Significant increase in knowledge scores post-training",
    "Result 2": "Large disparity in naloxone possession between groups",
    "Result 3": "Naloxone possession did not influence risky opioid use
or treatment interest",
    "Result 4": "Bidirectional relationship between naloxone possession
and opioid use frequency",
    "Result 5": "No significant difference in overdose incidents based on
naloxone possession"
}
```

```
paper_data126 = {
```

```
"Title": "Public attitudes and beliefs about Virginia community
pharmacists dispensing and administering naloxone",
  "Year": 2018,
  "Journal": "Journal of the American Pharmacists Association",
  "Methodology": "Survey of public attitudes in Virginia",
  "Research Question": "To determine public awareness and attitudes
concerning naloxone and to assess perceived benefits and barriers related
to naloxone dispensed and administered by community pharmacists",
  "Policy Implication 1": "Need for patient education by healthcare
professionals and public health organizations on naloxone",
  "Policy Implication 2": "Community pharmacists play a significant
role in expanding naloxone access",
  "Policy Implication 3": "Addressing public misconceptions about
naloxone and its potential to promote drug misuse",
  "Policy Implication 4": "Importance of educational interventions and
communication to decrease stigma and prevent opioid overdose deaths",
  "Policy Implication 5": "None",
  "Result 1": "Majority of respondents were not aware of naloxone
before the survey but were in favor of pharmacists dispensing and
administering it",
  "Result 2": "Most common barrier identified was belief that naloxone
promotes drug abuse and misuse",
  "Result 3": "Over half of respondents agreed that naloxone should be
available to everyone",
  "Result 4": "Naloxone availability believed to create a more positive
image for community pharmacies",
  "Result 5": "Significant need for further patient education on
naloxone"
}
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```
paper_data127 = {
  "Title": "Randomized controlled trial comparing the effectiveness and
safety of intranasal and intramuscular naloxone for the treatment of
suspected heroin overdose",
  "Year": 2009,
  "Journal": "Addiction",
  "Methodology": "Prospective randomized unblinded trial",
  "Research Question": "To compare the effectiveness of concentrated
intranasal (i.n.) naloxone to intramuscular (i.m.) naloxone for suspected
opiate overdose in a pre-hospital setting",
  "Policy Implication 1": "Intranasal naloxone as a viable alternative
to intramuscular administration for reducing needlestick injury risks in
EMS personnel",
  "Policy Implication 2": "None",
  "Policy Implication 3": "None",
  "Policy Implication 4": "None",
  "Policy Implication 5": "None",
  "Result 1": "Similar response rates within 10 minutes for i.n.
(72.3%) and i.m. (77.5%) naloxone",
  "Result 2": "No significant difference in mean response time between
i.n. and i.m. naloxone",
  "Result 3": "Fewer patients required supplementary naloxone with i.m.
administration compared to i.n.",
}
```

```
    "Result 4": "Concentrated intranasal naloxone successfully reversed
heroin overdose in 82% of patients",
    "Result 5": "Non-response to naloxone therapy after ambulance
response reported in 20-63% of cases"
}
```

```
paper_data128 = {
  "Title": "State naloxone access laws are associated with an increase
in the number of naloxone prescriptions dispensed in retail pharmacies",
  "Year": 2018,
  "Journal": "Drug and Alcohol Dependence",
  "Methodology": "Analysis of retail pharmacy data and state naloxone
laws",
  "Research Question": "To investigate whether naloxone access laws
were associated with an increase in naloxone dispensing from retail
pharmacies in the United States",
  "Policy Implication 1": "Naloxone access laws can significantly
increase the availability and accessibility of naloxone",
  "Policy Implication 2": "Need for additional legal and regulatory
responses to increase naloxone access in pharmacies",
  "Policy Implication 3": "Importance of educating prescribers,
pharmacists, and the public about naloxone",
  "Policy Implication 4": "None",
  "Policy Implication 5": "None",
  "Result 1": "Naloxone access laws associated with an average increase
of 78 naloxone prescriptions dispensed per state per quarter",
  "Result 2": "Average 79% increase in naloxone dispensing from U.S.
retail pharmacies in states with naloxone laws",
  "Result 3": "No prior study had investigated the impact of naloxone
access laws on naloxone dispensing in the U.S. retail pharmacy setting",
  "Result 4": "Family practice physicians prescribed the largest
percentage of naloxone",
  "Result 5": "Challenges remain in increasing access to naloxone,
especially in rural areas"
}
```

```
paper_data129 = {
  "Title": "Trends in State-Level Pharmacy-Based Naloxone Dispensing
Rates 2012-2019",
  "Year": 2021,
  "Journal": "American Journal of Preventive Medicine",
  "Methodology": "Analysis of state-level trends in naloxone dispensing
from community pharmacies",
  "Research Question": "To examine the state-level trends in naloxone
dispensing from 2012 to 2019 for all 50 states and the District of
Columbia",
  "Policy Implication 1": "Increasing awareness and availability of
naloxone in community pharmacies",
  "Policy Implication 2": "Need for state-specific intervention
programs to improve naloxone access",
  "Policy Implication 3": "Addressing geographic disparities in
naloxone dispensing",
  "Policy Implication 4": "None",
}
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```

    "Policy Implication 5": "None",
    "Result 1": "Significant increase in naloxone dispensing from 2012 to
2019 across all states",
    "Result 2": "Average state-level naloxone dispensing rates increased
substantially over the study period",
    "Result 3": "Geographic inequality in naloxone dispensing observed
with wide state-level variation",
    "Result 4": "Low overall naloxone dispensing rates with substantial
variation across states",
    "Result 5": "Increased efforts needed to improve naloxone access and
distribution"
}

```

```

additional_paper_data5=[
    paper_data105, paper_data106, paper_data107, paper_data108,
    paper_data109,
    paper_data110, paper_data111, paper_data112, paper_data113,
    paper_data114,
    paper_data115, paper_data116, paper_data117, paper_data118,
    paper_data119,
    paper_data120, paper_data121, paper_data122, paper_data123,
    paper_data124,
    paper_data125, paper_data126, paper_data127, paper_data128,
    paper_data129
]

```

```

# Convert each paper's data into a DataFrame
all_papers_df5 = pd.concat([pd.DataFrame([data]) for data in
additional_paper_data5], ignore_index=True)

```

```

# Define the file path
file_path = # Replace 'my_excel_file.xlsx' with your desired file name

```

```

# Save the DataFrame to an Excel file
(file_path, index=False)

```

```

# Create a Pandas Excel writer using XlsxWriter as the engine
excel_path = r'C:\Users\Mengyang\Desktop\All.xlsx'
writer = pd.ExcelWriter(excel_path, engine='xlsxwriter')

```

```

# Write each dataframe to a different worksheet
all_papers_df.to_excel(writer, sheet_name='Evidence Based')
all_papers_df2.to_excel(writer, sheet_name='Recovery Support')
all_papers_df3.to_excel(writer, sheet_name='Overdose Response')
all_papers_df4.to_excel(writer, sheet_name='Criminal Justice')
all_papers_df5.to_excel(writer, sheet_name='Naloxone Distribution')

```

```

# Close the Pandas Excel writer and output the Excel file
writer.close()

```

```

excel_path
# # Convert the data to a DataFrame
# df = pd.DataFrame([paper_data])

```

```
# # Save the DataFrame to an Excel file
# df.to_excel("opioid_dependence_treatment_data_policy_analysis.xlsx",
index=False)

# print("Data has been saved to
'opioid_dependence_treatment_data_policy_analysis.xlsx'")
```