



Do individuals who complete treatment court programs have better health and societal outcomes than those who are eligible but do not enter a program?

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Collaborations with PADOH

- OD2A Pennsylvania Prescription Drug Monitoring Program Evaluation
- Workforce Development Plan
- Grant Writing
- Mid-Atlantic Regional Public Health Training Center
- Prescription Drug Monitoring Program Project
- Pennsylvania Public Health Law Bench Book



What is “Legal Epidemiology?”

- The scientific study and deployment of law as a factor in the cause, distribution, and prevention of disease and injury in a population
- Transdisciplinary

Legal Epidemiology Encompasses

- Legal Etiology
- Legal Prevention and Control
- Policy Surveillance



Legal Epidemiology in Practice

- Engage
- Identify research needs
- Create legal data
- Analyze
- Translate
- Monitor and repeat



Legal Epidemiology

Scientific

Systematic

Transparent

Replicable

Precise

Measurable

Research Grants to Identify Effective Strategies for Opioid Overdose Prevention



**CENTERS FOR DISEASE™
CONTROL AND PREVENTION**

Centers for Disease Control

National Center for Injury Prevention and Control Extramural Research Program Office

Research Grants to Identify Effective Strategies for Opioid Overdose Prevention
RFA-CE-19-002

Application Due Date: 04/08/2019

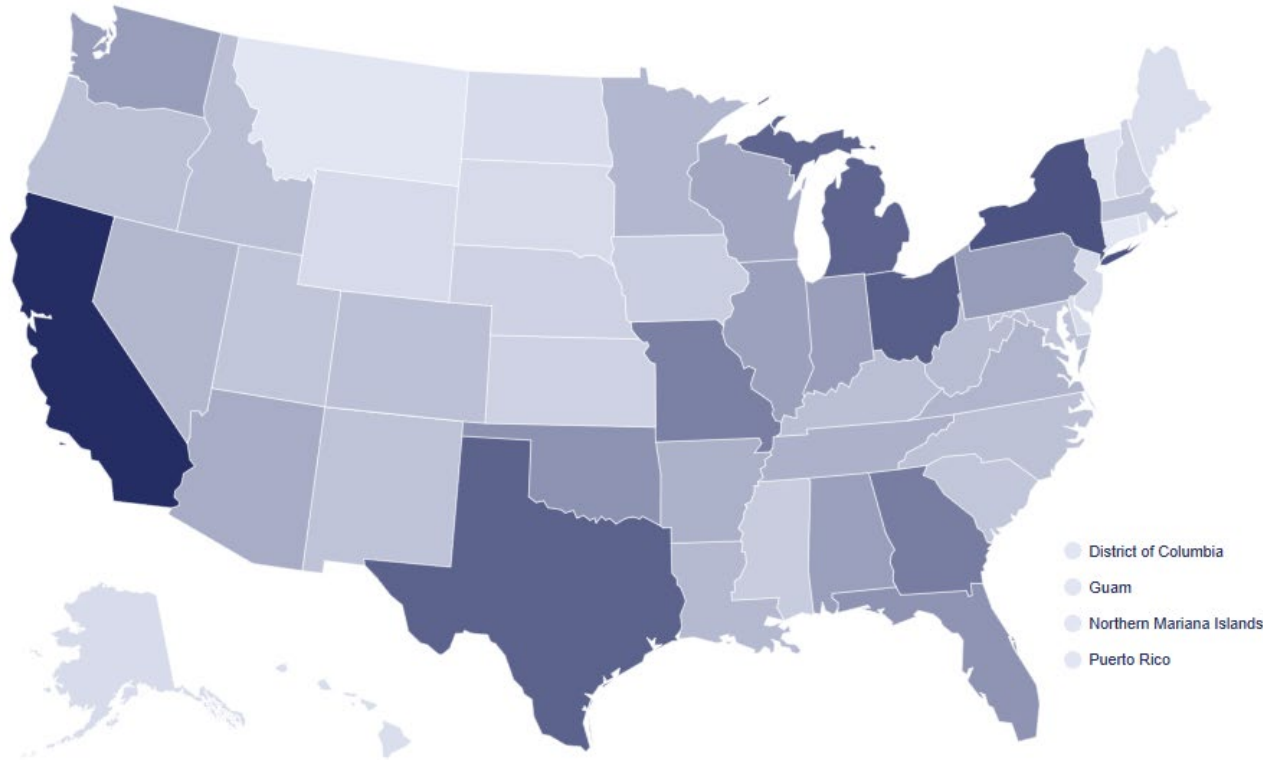


Original Problem Statement

Do individuals who complete treatment court programs have better health and societal outcomes than those who are eligible but do not enter a program?

What are “Treatment Courts?”

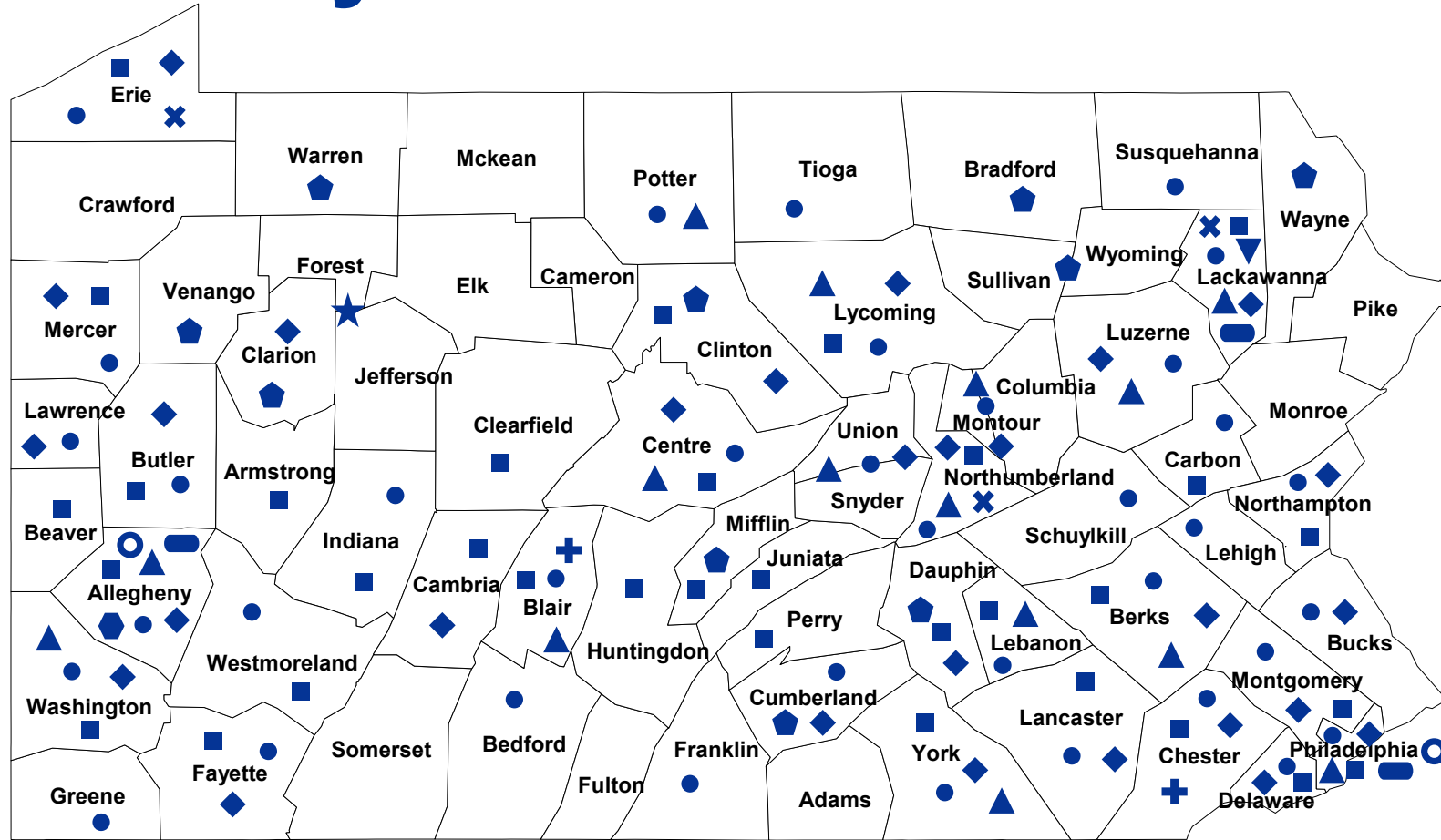
Treatment Courts by State/Territory



US Treatment Courts

Court Type	Court Count
Adult Drug	1826
Hybrid Drug/DUI	364
DUI/DWI	308
Adult Co-occurring Disorder	44
Family Treatment	383
Adult Mental Health/Wellness	655
Opioid	36
Adult Reentry	61
Veterans Treatment	552
Juvenile Drug Treatment	261
Juvenile Co-occurring Disorder	9
Juvenile Mental Health/Wellness	60
Juvenile Reentry	2
Community	58
Total	4255

Pennsylvania's Treatment Courts

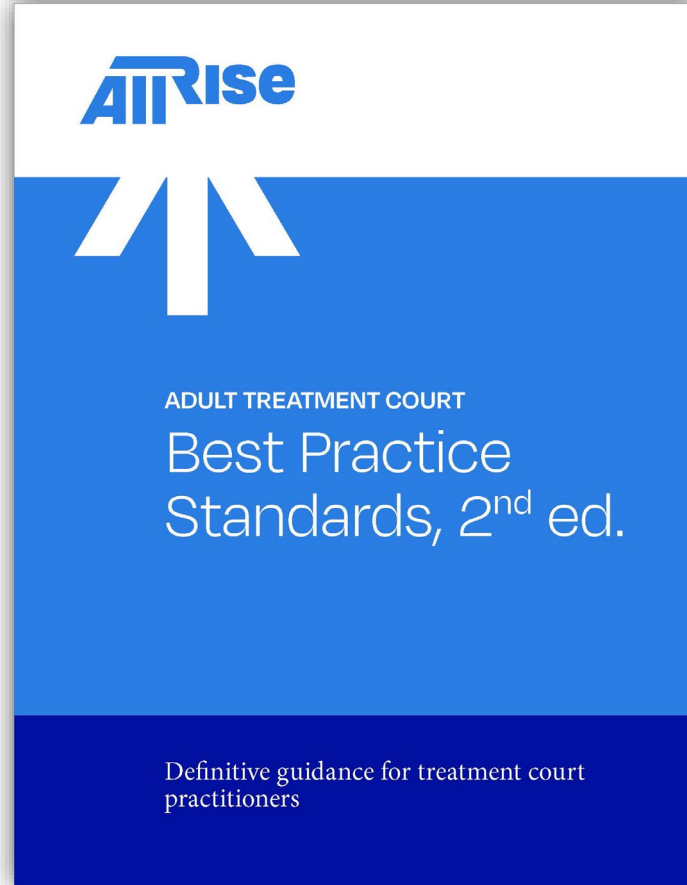


- Drug Court
- ★ Treatment Court
- + Recovery Drug Court
- ⬠ Adult Drug/DUI Hybrid Court
- ▲ DUI Court
- ✕ Family Drug Court
- ◆ Adult Mental Health Court
- ▼ Co-Occurring Court
- Veterans Court*
- ▬ Domestic Violence Court
- ⬡ Sexual Offense Court
- Prostitution Court

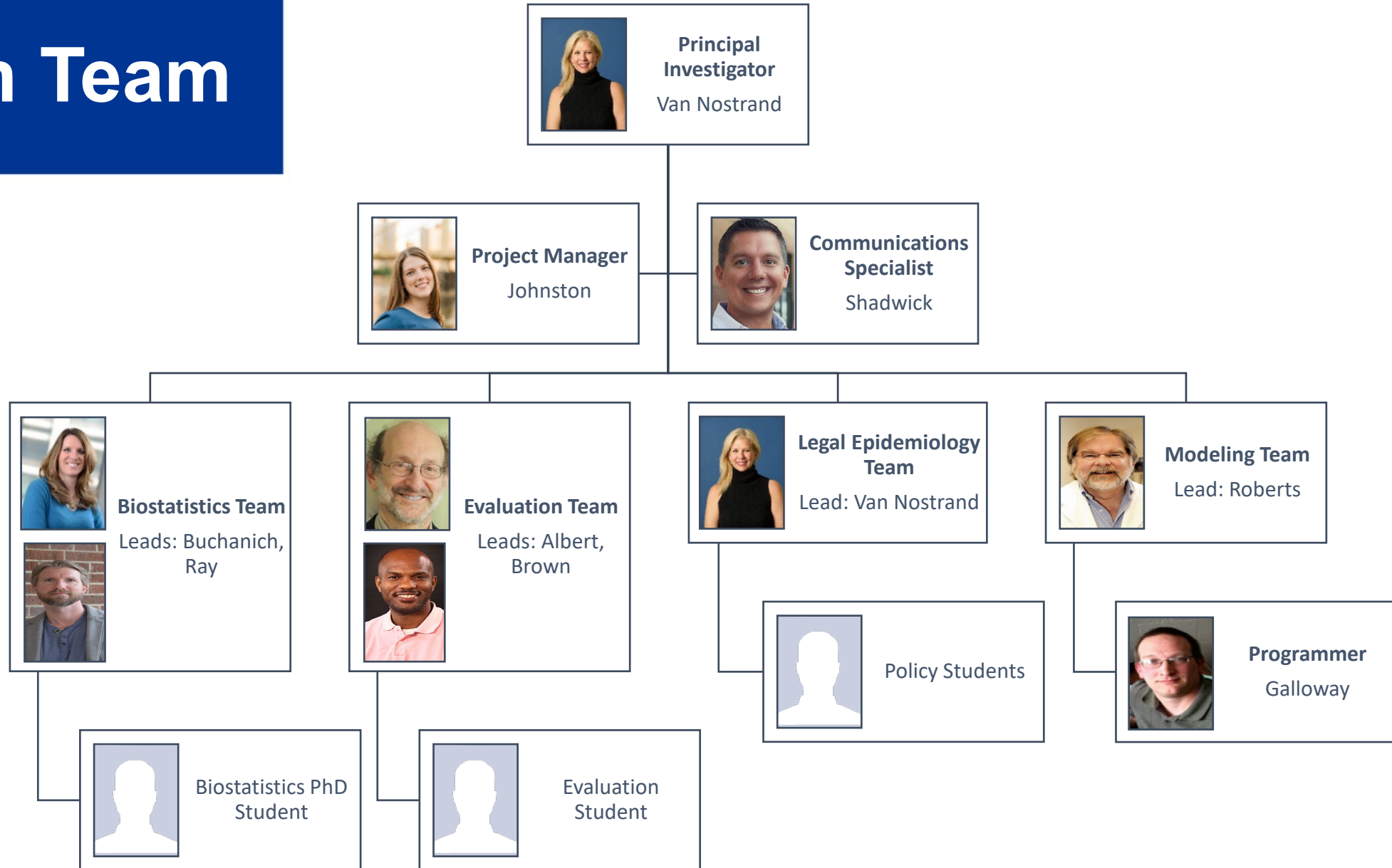
* Veterans Court is a regional court in Blair, Centre, Clearfield, Clinton, Huntingdon, Juniata, Mifflin & Perry



Treatment Court Standards



Research Team



Stakeholder Committee

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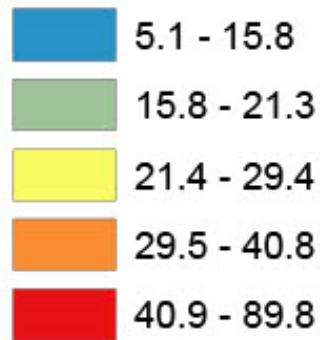
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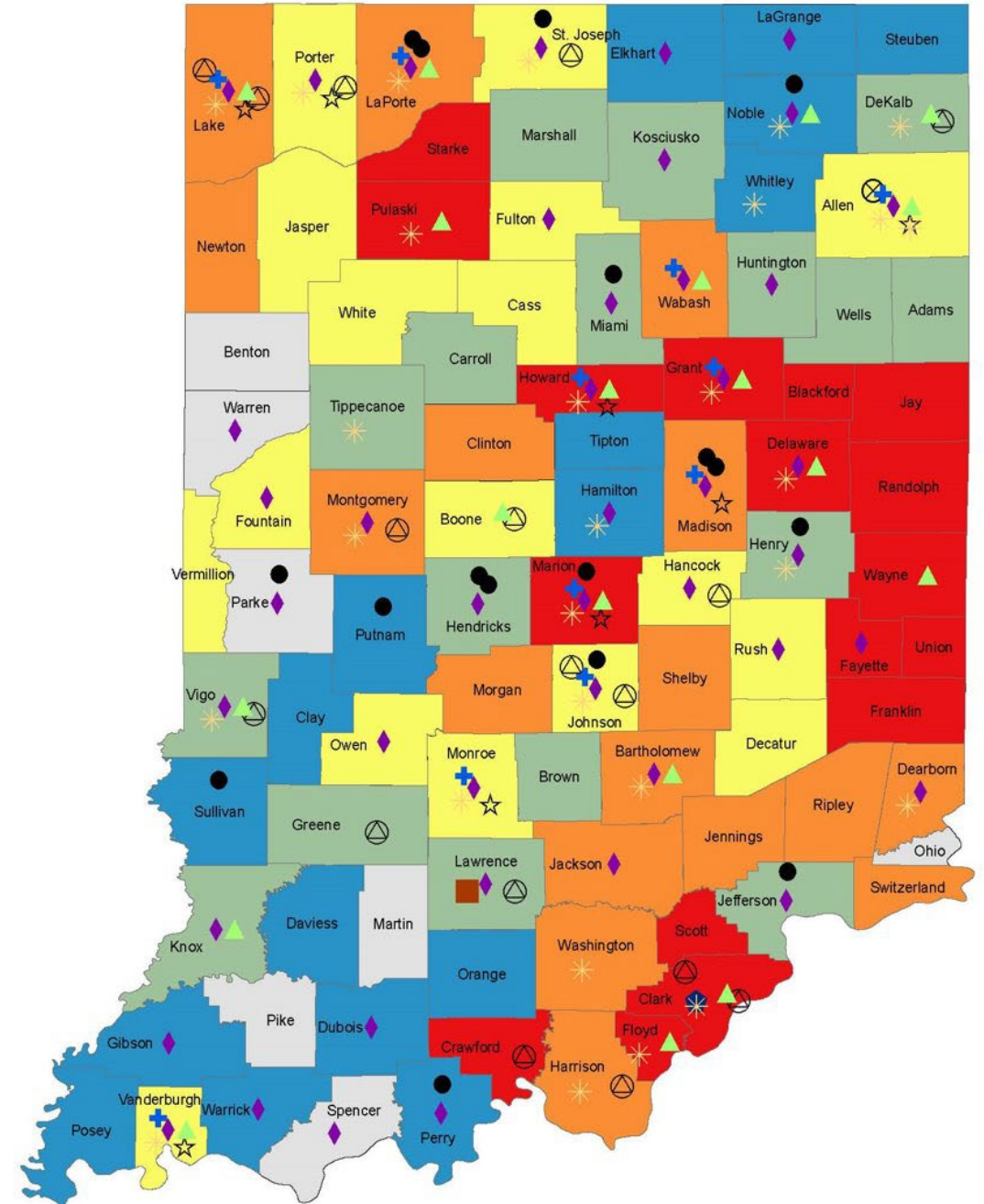


Drug Overdose Rates and Treatment Court Locations in Indiana

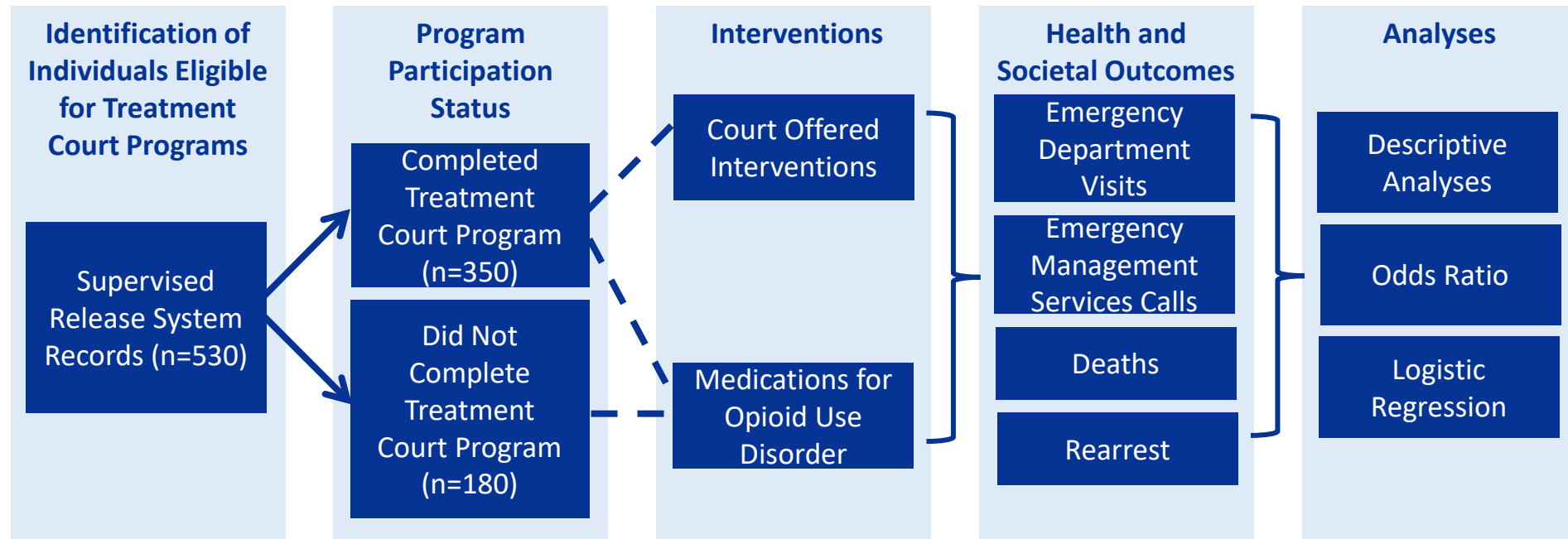
Overdose Mortality AAR 2016-2020



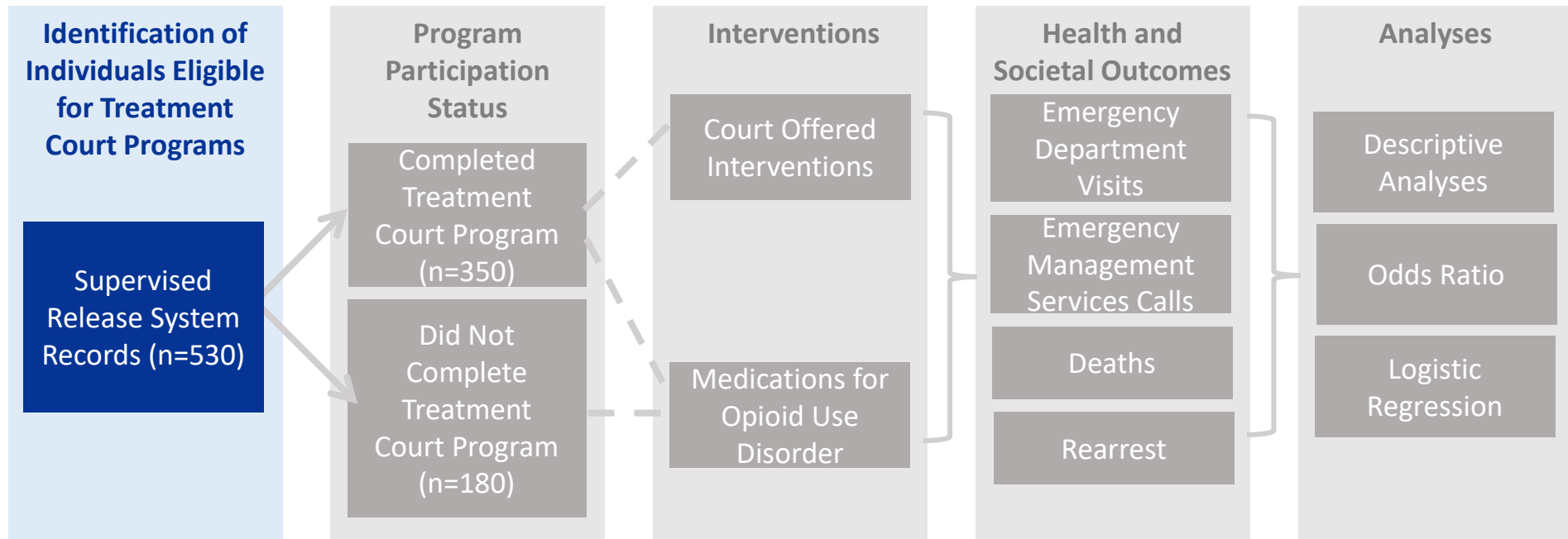
Date: 2/14/2022



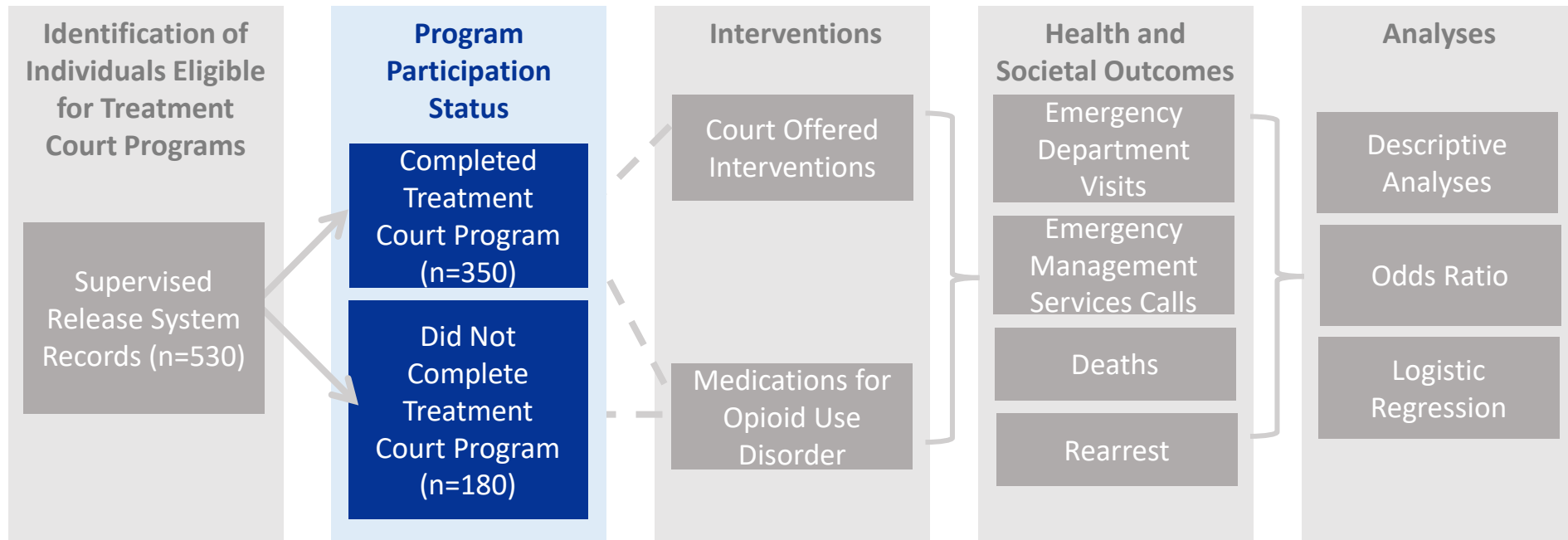
Methods



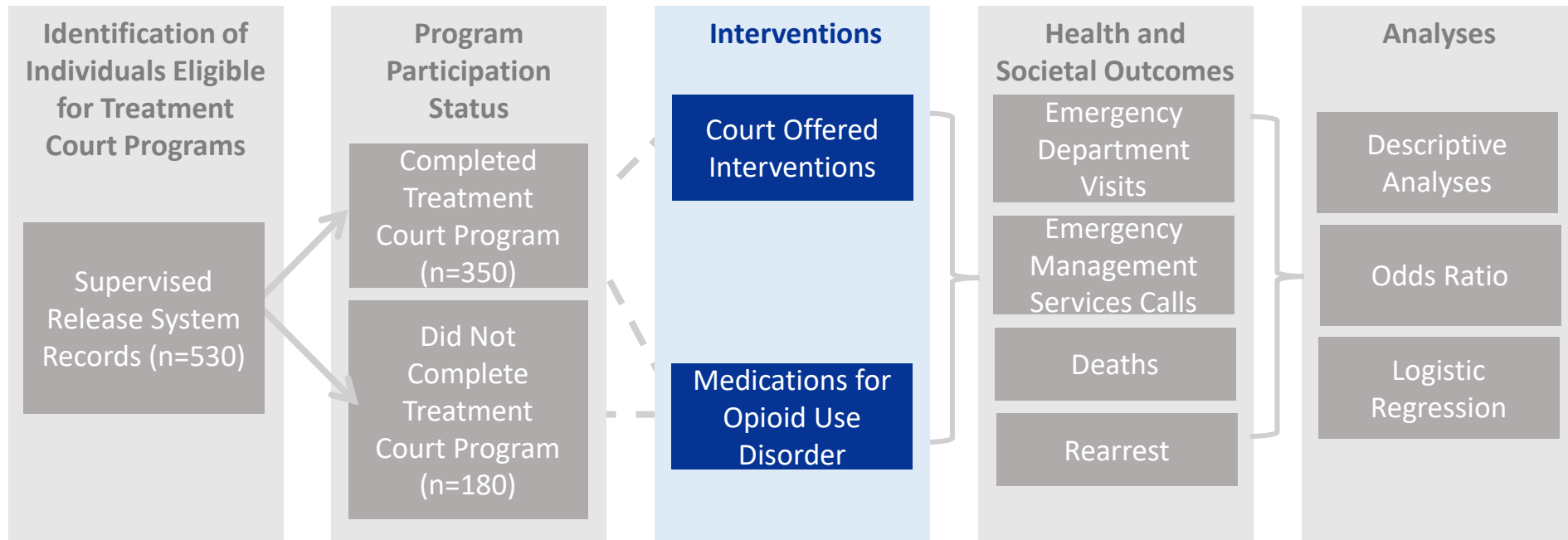
Methods



Methods



Methods



Coding

40. Are participants referred to substance abuse counseling?

Yes

No

Other (Please Specify)

40.1. Is substance abuse counseling mandatory for participants?

Yes

No

Unknown

Other (Please Specify)

40.2. Are substance abuse counseling sessions conducted individually?

Yes

No

Unknown

Other (Please Specify)

41. Are participants referred to substance abuse education?

Yes

No

Other (Please Specify)

50. Does the problem-solving court refer participants to any of the following services? (select all that apply)

Financial Counseling

Employment/job skills training or placement

Disability Services

Religion-based services

Life Skills classes

Unknown

Other (Please Specify)

55. Does the problem-solving court offer incentives for compliance with treatment?

Yes

No

Other (Please Specify)

55.1. What incentives are offered? (select all that apply)

Praise from judge/court

Certificates of achievement

Movie-event tickets

Voucher assistance

Later curfew

Promotion to next phase

Waiver of drug screening fees

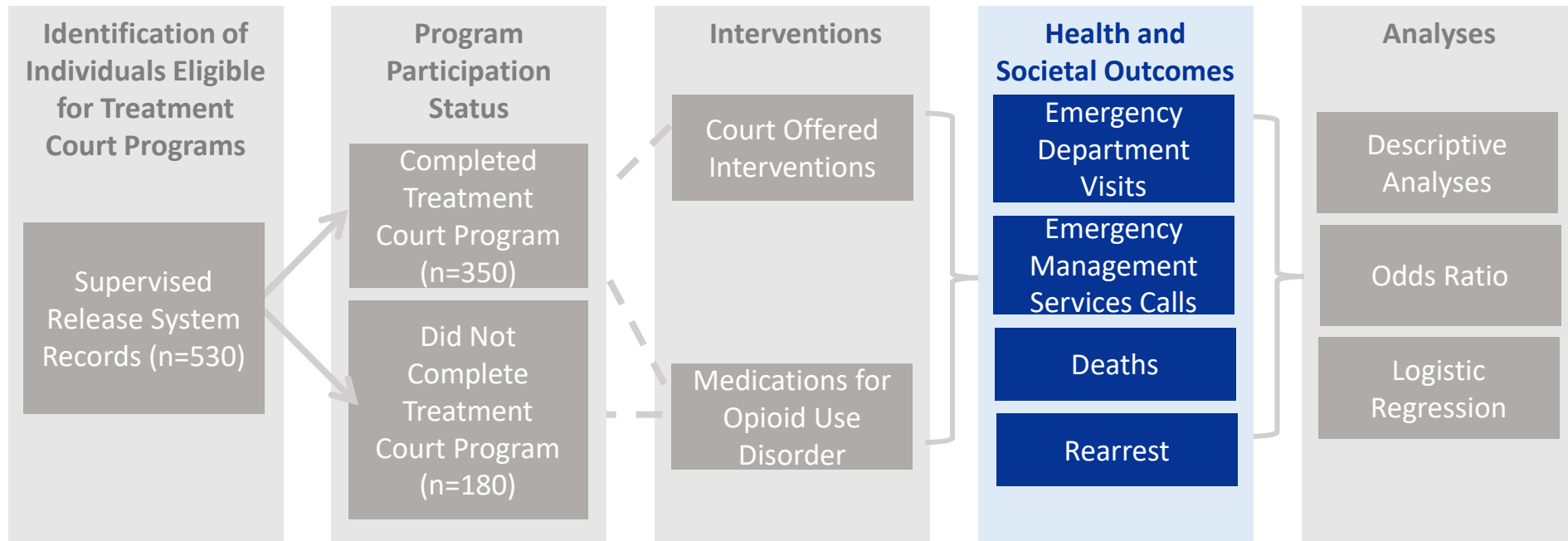
Gift Cards

Unknown

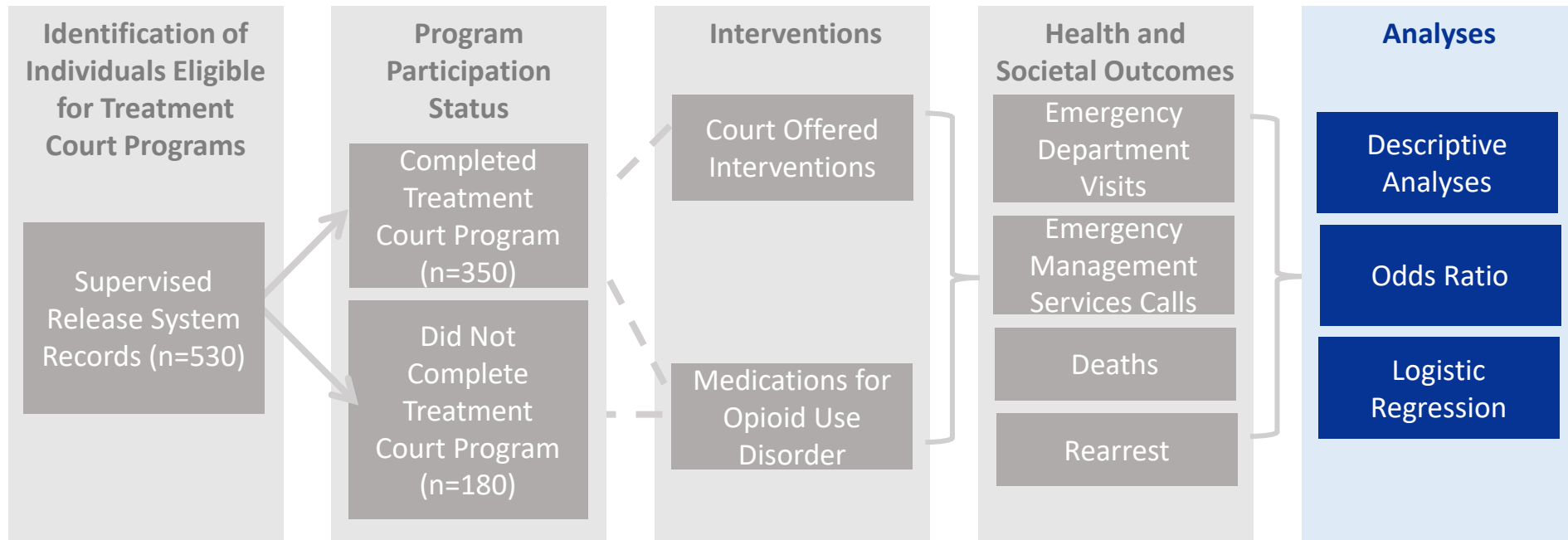
Other (Please Specify)



Methods



Methods



Participants by Court Type

Court Type	Study Cohort (n=530)	Eligible and Completed (n=350)	Eligible but did not Enter (n=180)
Adult drug and “Other”	272	226	40
Veterans	29	28	1
Mental Health	153	17	136
Re-Entry	82	79	3



Demographic Characteristics

Characteristic	Eligible and Completed Treatment Court – (n=350)	Eligible but did not Complete Treatment Court (n=180)	Prison Population in Indiana
Median age	32	34	38
% male	79	59	90.5
% female	21	41	9.5
% black	18	39	34
% white	79	57	61



Pharmaceutical Interventions

Pharmaceutical Interventions	Percentage
Individuals in the study cohort with prescriptions in the PDMP	63%
Individuals with prescriptions in the PDMP who completed a treatment court program	69%
Individuals with prescriptions in the PDMP who did not participate in a treatment court program	31%
Individuals with an MOUD prescription in the PDMP	42%
Individuals with an MOUD prescription in the PDMP who completed a treatment program	45%
Individuals with an MOUD prescription in the PDMP who did not participate in a treatment court program	35%



Non-Pharmaceutical Interventions

Non-Pharmaceutical Intervention	Percentage of Courts Offering the Intervention
Cognitive and Behavioral Therapy (CBT)	86.6%
Support Groups	80.0%
Trauma Counseling	80.0%
Anger Management	80.0%
Substance Education	73.3%
Alcoholics Anonymous Group Meetings	73.3%
Narcotics Anonymous Group Meetings	73.3%
Illicit Drug Testing	66.6%
Inpatient Treatment Home Visits	53.3%
Home Visits	40%
Mandatory Substance Counseling	13.3%



Outcomes

Outcome	Overall Odds Ratio and 95%CI
Death	0.17 (0.07, 0.42)
Emergency Department Utilization	0.66 (0.36-1.19)
Emergency Management Services Utilization	0.17 (0.11, 0.26)
Emergency Management Services Utilization for Drug Use	0.26 (0.17, 0.38)
Emergency Services Utilization with Naloxone	0.60 (0.36, 0.97)
Re-Arrest	0.07 (0.04, 0.11)



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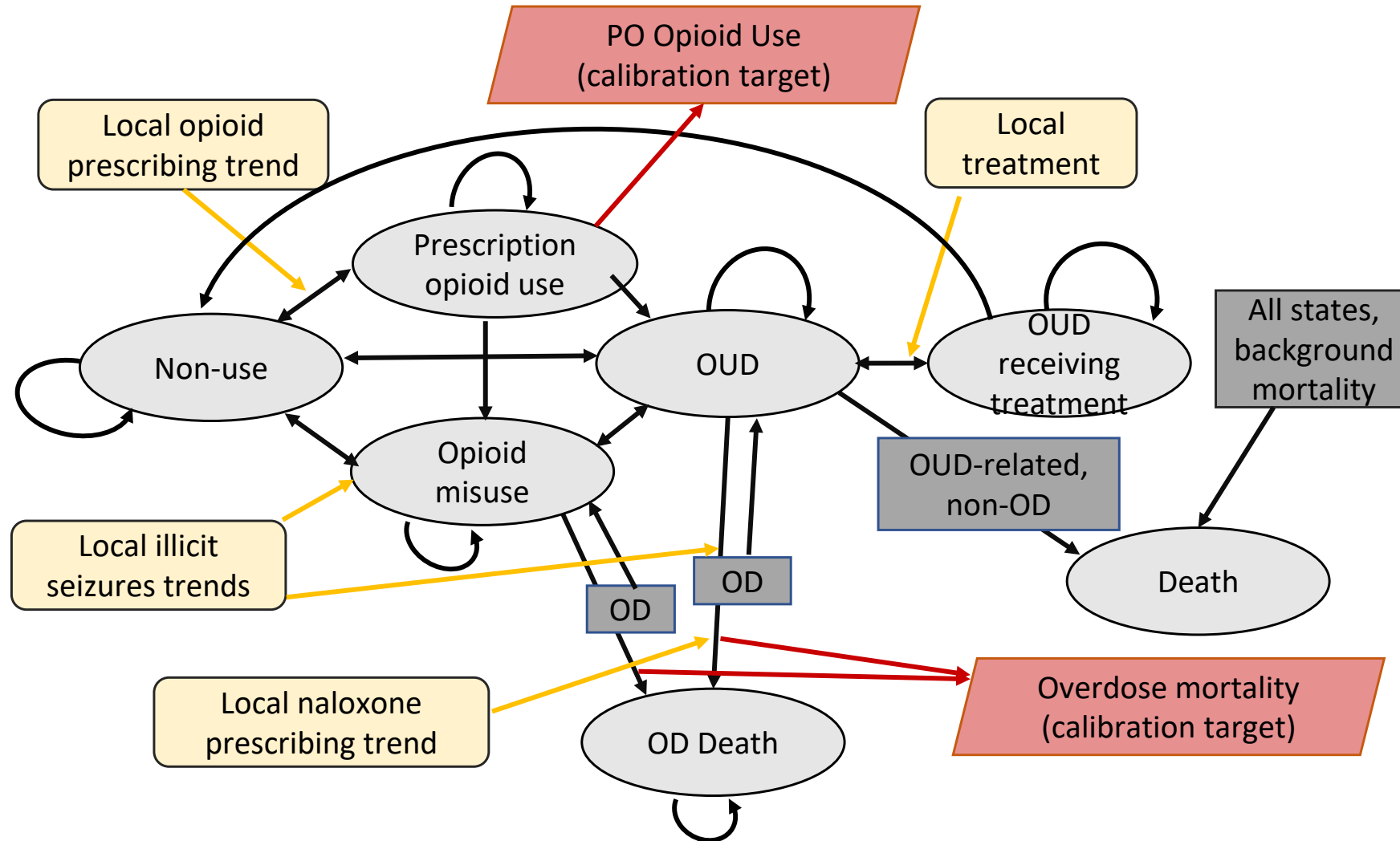
YES (at least in our study)!

Limitations

- Sample size
- Selection bias
- Intervention utilization
- Generalizability



Modeling Opioid Use Disorder



Model

<https://fred.publichealth.pitt.edu/psc>



Adams

Total Naloxone Doses Available Annually at County Level Baseline +50% +100%

Annual Office Based Buprenorphine Prescriptions Baseline +50% +100%

Problem Solving Court Available? **No**

Play Simulation **Restart Simulation**

Opioid Use Disorder & Opioid Overdose Death
Adams County, IN
2021-04-07

Opioid Use Disorder Overdose Death

Opioid Use Disorder & Opioid Overdose Death
Adams County, IN
2021-02-24

Opioid Use Disorder Overdose Death

Over the baseline simulation period (2020 through 2024),

- 208 +/- 4 cases of opioid use disorder (mean +/- S.E.M.)
- 56 +/- 3 overdose deaths (mean +/- S.E.M)

50% increase in naloxone, 50% increase in MOUD, and lacking the availability of a PSC over the simulation period (2020 through 2024),

- 211 +/- 6 cases of opioid use disorder (mean +/- S.E.M.) (2% change)
- 55 +/- 2 overdose deaths (mean +/- S.E.M) (-3% change)

Download a One Pager

Visit <https://sites.temple.edu/pscproject/resources/>

or scan below



What's Next?

- Expand study to other jurisdictions
- Look at other outcomes
- Focus on juvenile treatment courts
- Compare treatment court participation v. incarceration
- Use methodology to explore other topics
- Add a qualitative study
- Conduct an economic analysis
- Other ideas?





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