



Oregon Youth Authority Feeder System Study

Supporting the Oregon Youth Authority's mission to protect the public and reduce crime by holding youth offenders accountable and providing opportunities for reformation in safe environments.

OYA Feeder System Study

- Social services and the criminal justice system serve similar (often the same) populations
 - E.g., Crossover youth, dual-involved mental health and substance abusing populations
- Costs of services increase as people move “deeper” into the system
 - Previous contacts with various services may be missed opportunities for prevention
- Move resources from later systems to earlier services to prevent criminal behavior



Data Sources

- **DHS/OHA**
 - Medical Assistance (e.g., OHP, CHIP)
 - Self-Sufficiency (e.g., SNAP, TANF)
 - Child Welfare (Substantiated abuse, Foster Care)
 - Alcohol and Drug Treatment Services
 - Mental Health Treatment Services
- **Oregon Youth Authority** (Probation, close custody commitment, parole)
- **County Juvenile Departments**
- **Employment Department** (Wages, hours, industry)
- **Department of Education** (Special education, attendance, discipline)
- **Oregon State Police** (Arrests)
- **Oregon Department of Corrections** (Probation, incarceration, parole)



Guiding Questions and Progress

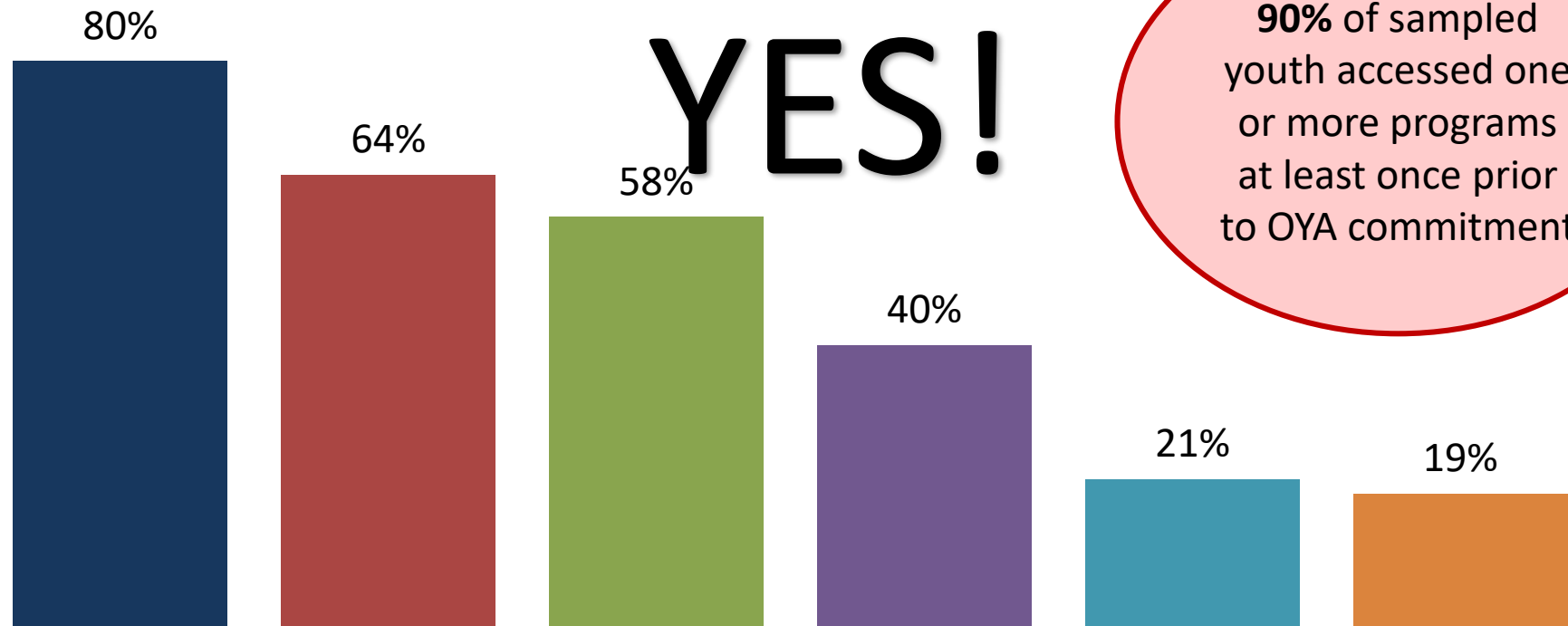
- 1) Are there **opportunities to intervene** in the lives of at-risk individuals and prevent later involvement in the justice system?
 - Study 1: Explored OYA youths' social service histories
- 2) If there are opportunities for prevention, which agencies and/or client populations are the **best targets for intervention**?
 - Study 2: Identified services with largest concentrations of future OYA youth
- 3) What are the **individual and family characteristics and service utilization patterns associated with increased risk** of justice system involvement?
 - Study 3: Targeted analysis of select program areas identified in Study 2





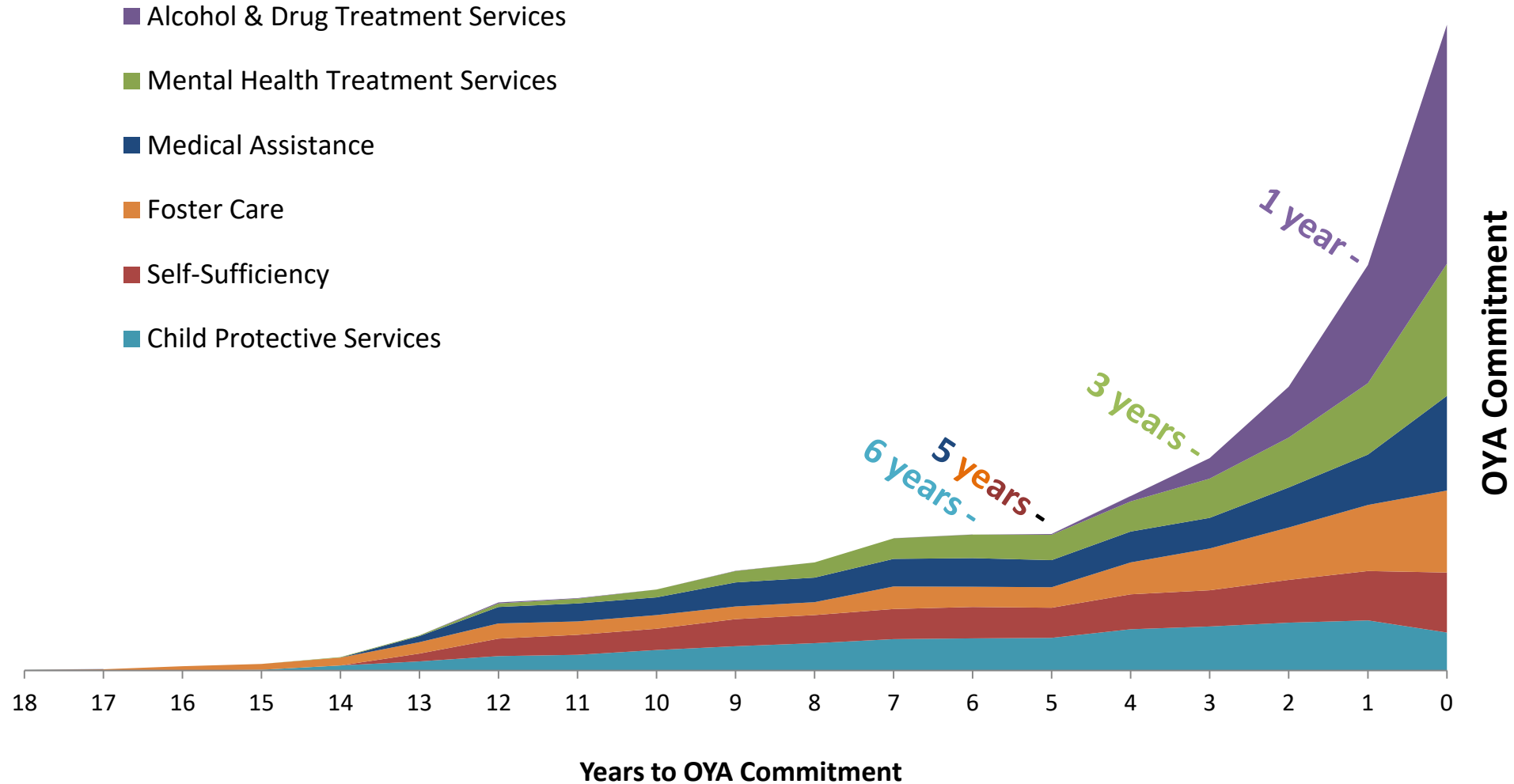
Study 1: Do opportunities to intervene exist?

- Medical Assistance
- Mental Health Treatment Services
- Child Protective Services
- Self-Sufficiency
- Alcohol & Drug Treatment Services
- Foster Care



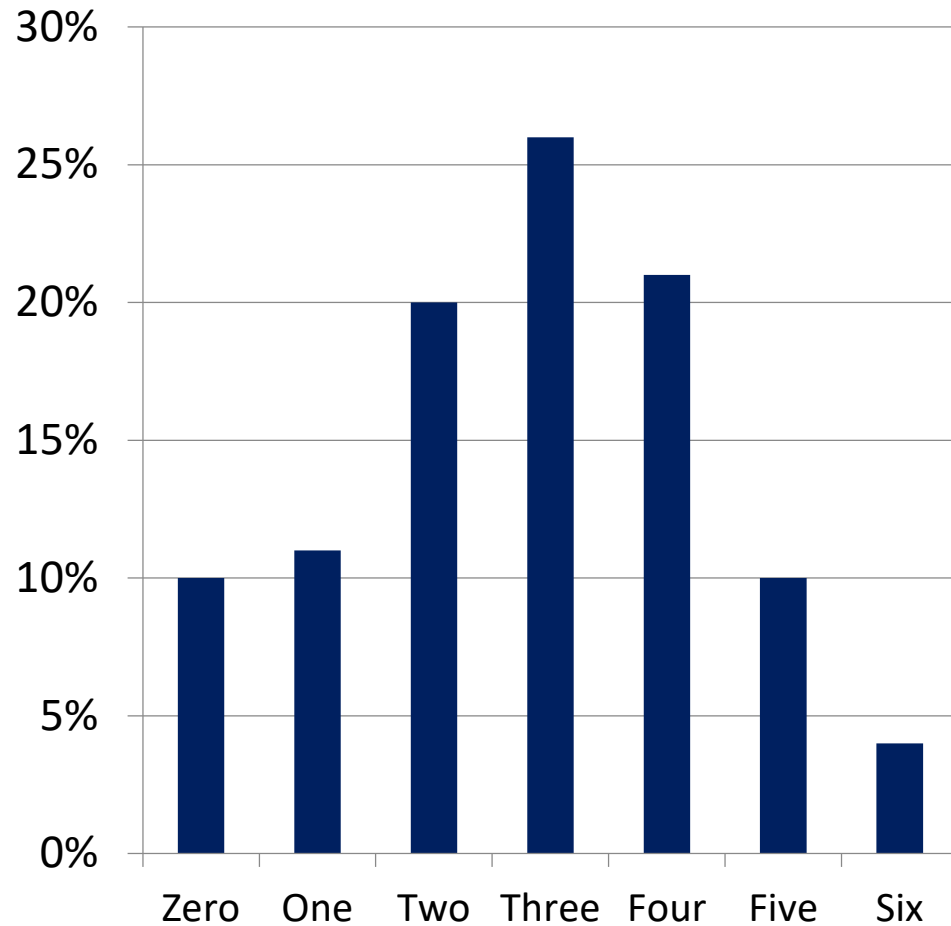


Study 1: Average time between program and OYA





Study 1: Multi-program use and overlap



Patterns of overlap between certain programs:

- Foster Care
 - + Mental Health Treatment (82%)
 - + Alcohol & Drug Treatment (42%)
- Child Protective Services
 - + Mental Health Treatment (78%)
 - + Alcohol & Drug Treatment (45%)
- Alcohol & Drug Treatment + Mental Health Treatment (67%)



Study 2: Which populations should be targeted?

Variable	β	S.E.	Wald	df	Sig.	Odds ratio
Constant	-1.01	.05	460.09	1	.000	0.37
Alcohol & Drug Treatment involvement (Yes/No)	2.08	.05	1874.98	1	.000	7.83
Mental Health Treatment involvement (Yes/No)	1.57	.04	1794.88	1	.000	4.81
Foster Care involvement (Yes/No)	1.36	.06	518.01	1	.000	3.91
Self-Sufficiency involvement (Yes/No)	-0.36	.04	72.83	1	.000	0.69
Medical Assistance involvement (Yes/No)	0.14	.04	13.44	1	.000	1.15

AUC = .81

FOSTER CARE

- Program involvement = Need for service!
 - Involvement in a given program area signifies a need for that service
 - The *need* is what drives the probability of OYA commitment, not the service itself





Study 3: Characteristics and service needs linked to risk

- Series of models predicting OYA commitment among:
 - Foster Care population
 - Mental Health Treatment Services population
 - Alcohol and Drug Treatment Services population
 - *K-12 student population (add-on; forthcoming)*



Study 3: Data & Method

Foster Care

Age at first removal

times in Foster Care
+ Yes/No:

different placements
Mental Health Treatment

A&D Treatment

Self-Sufficiency

Child Protective Services

Medical Assistance

Family history of child abuse

Parental A&D use

Family housing stability

Domestic violence in the home

Voluntary/Involuntary removals

Mental Health

Age at first MH treatment

MH treatment episodes
+ Yes/No:

LOS in MH treatment
Foster Care

A&D Treatment

Self-Sufficiency

Child Protective Services

Medical Assistance

Number of complete and
incomplete MH treatment
episodes

Reason(s) for treatment
incompletion

Alcohol & Drug

Age at first A&D treatment

of A&D treatment episodes
+ Yes/No:

LOS in A&D treatment
Foster Care

Mental Health Treatment

Self-Sufficiency

Child Protective Services

Medical Assistance

Age at first drug use

Assessed level of need

Frequency/method of use

Drug testing results

Recent arrest history



Study 3.1: Foster Care Population (n=35,448)

	β	S.E.	Wald	df	Sig.	Odds ratio	Impact to risk
Constant	-3.12	0.21	224.76	1	.000	0.04	—
Child gender (Male)	1.28	0.08	252.95	1	.000	3.58	↑
Race/Ethnicity: African American	0.43	0.14	9.67	1	.002	1.54	↑
Race/Ethnicity: Other	-0.54	0.25	4.50	1	.034	0.59	↓
Alcohol & Drug Treatment Services involvement (Yes)	1.27	0.09	209.14	1	.000	3.55	↑
Age at first known foster care removal	0.10	0.01	118.96	1	.000	1.11	↑
Number of foster care episodes to date	0.56	0.06	79.45	1	.000	1.76	↑
Mental Health Treatment Services involvement (Yes)	0.84	0.10	70.70	1	.000	2.32	↑
Cumulative time spent in foster care to date (Years)	-0.15	0.02	58.70	1	.000	0.86	↓
Previous foster care removals for child behavior (Yes)	0.56	0.08	45.78	1	.000	1.75	↑
Number of substantiated CPS claims for threat of harm	-0.35	0.06	33.94	1	.000	0.71	↓
Self-Sufficiency involvement (Yes)	-0.41	0.10	18.78	1	.000	0.66	↓

AUC = .815

Study 3.2: Mental Health Tx Population (n=106,823)

	β	S.E.	Wald	df	Sig.	Odds ratio	Impact to risk
Constant	-4.96	0.08	3440.55	1	.000	0.007	—
Child gender (Male)	1.31	0.03	1158.57	1	.000	3.73	↑
Race/Ethnicity: African American	0.40	0.06	45.91	1	.000	1.49	↑
Race/Ethnicity: Other/Unknown	-0.76	0.17	19.01	1	.000	0.46	↓
Alcohol & Drug Treatment Services involvement (Yes)	1.31	0.03	1480.22	1	.000	3.70	↑
Number of MH tx referrals made by the criminal justice system	0.84	0.02	1115.27	1	.000	2.33	↑
Percentage of MH tx episodes that were incomplete (any reason)	0.65	0.03	286.20	1	.000	1.92	↑
Self-Sufficiency involvement (Yes)	-0.54	0.03	205.62	1	.000	0.58	↓
Foster Care involvement (Yes)	0.55	0.03	199.10	1	.000	1.73	↑
Number of psychiatric residential treatment episodes	0.19	0.02	96.92	1	.000	1.21	↑
Age at first known mental health treatment episode	0.03	0.01	62.41	1	.000	1.03	↑
Number of MH tx referrals made by personal support system	-0.12	0.01	41.60	1	.000	0.88	↓
Number of psychiatric day treatment episodes	0.31	0.05	28.82	1	.000	1.37	↑

AUC = .816

Study 3.3: Alcohol & Drug Tx Population (n=43,466)

	β	S.E.	Wald	df	Sig.	Odds ratio	Impact to risk
Constant	-4.37	0.12	1197.55	1	.000	0.01	—
Child gender (Male)	0.68	0.04	199.29	1	.000	1.98	↑
Race/Ethnicity: Hispanic/Latino	0.42	0.05	60.56	1	.000	1.53	↑
Race/Ethnicity: African American	0.53	0.08	44.29	1	.000	1.70	↑
Race/Ethnicity: Native American	-0.31	0.09	10.34	1	.001	0.72	↓
Number of times client was arrested during 5 years before current treatment episode	0.40	0.01	946.90	1	.000	1.50	↑
Mental Health Treatment Services involvement (Yes)	1.17	0.04	710.11	1	.000	3.22	↑
Client has never successfully completed an A&D tx episode (Completed none = 1; Completed at least some = 0)	0.77	0.04	333.40	1	.000	2.16	↑
Earliest reported age at first use of any substance (including nicotine)	-0.09	0.01	251.35	1	.000	0.91	↑
Involvement with residential drug treatment (Yes)	0.61	0.05	139.21	1	.000	1.85	↑
Number of A&D referrals made by personal support system	-0.48	0.06	59.01	1	.000	0.61	↓
Self-reported use of marijuana (Yes)	0.62	0.08	53.46	1	.000	1.87	↑
Foster Care involvement (Yes)	0.31	0.05	34.94	1	.000	1.37	↑

AUC = .825

Prevalence of OYA Commitment by Population

- Foster Care
 - 1,955 out of 35,448 Oregon foster care children = 6%
- Mental Health Treatment Services
 - 5,798 out of 133,529 Mental Health Treatment Services clients = 4.3%
- Alcohol & Drug Treatment Services
 - 3,965 out of 54,333 Alcohol & Drug Treatment Services clients = 7.3%
- Oregon Population of Young People (2010-2013) = 500,000
 - Average number of new OYA commitments per year = 750
 - Percent of Oregon young people committed to OYA = 0.0015%



Key Takeaways

- Ample opportunities to intervene and divert youth from juvenile justice exist in other service areas
- Certain programs serve large concentrations of future OYA youth
- Target populations in Foster Care, Mental Health Treatment, and Alcohol and Drug Treatment Services
 - Only small pockets need be targeted (4-7%)
 - Focus on young people within each population who show certain combinations of risk factors



Limitations to Interpretation

- Analyses do not include data from county juvenile departments
 - Cannot determine whether services were prompted by local informal or formal supervision
- Overlapping time periods covered by each dataset
 - Foster Care and Child Protective Services: 1998-2011
 - Medical Assistance & Self-Sufficiency: 2000-2010
 - A&D and Mental Health Treatment: 2000-2013
 - OYA: 2000-2013
- Overlap in delivery and receipt of services creates difficulty when isolating independent effects of each program





The Future

- Research:
 - Predicting OYA commitment among Oregon K-12 student population using data from Oregon Department of Education
- Policy/Practice
 - Implementation should ideally involve dynamic, real-time system
 - Findings should be delivered back to communities





Thank you!

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