

PRELIMINARY RECIDIVISM RATES:

WHAT DATA TELLS US ABOUT EBP AND RISK ASSESSMENT

PRESENTED AT:

2024 Criminal Justice Advisory Board Conference,
Pennsylvania Commission on Crime and Delinquency (PCCD)

PRESENTED BY:

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PRESENTED ON BEHALF OF:

The County Chief Adult Probation and Parole Officers Association of Pennsylvania

PRELIMINARY RECIDIVISM RATES

WHAT DATA TELLS US ABOUT EBP AND RISK ASSESSMENT

PRESENTER quick bio

ROB ORTH, IUP & PCCD

- Full-time consultant to PCCD since 2013; assist with leading PCCD's day-to-day research operations.
- Lead researcher on PCCD's county supervision efforts, including GIA (now CCAPPG), IP (now PRC), and measuring recidivism outcomes within county supervision.

NOTABLE RESEARCH PROJECTS

- Evaluated Grant-in-Aid program.
- Developed the CCAPPG funding formula (w/ CAPPAC Funding Sub)
- Created the County Adult Probation and Parole Caseload Statistics Report ([view the 2022 report](#)).
- Measured supervision recidivism rates in nearly a dozen counties.

CONTACT INFORMATION

- PCCD email: c-rorth@pa.gov

ABOUT PCCD and the important role it plays

GOVERNOR'S CRIMINAL JUSTICE PLANNING AGENCY

- Serves as the hub for coordinating, planning, and improving Pennsylvania's criminal and juvenile justice systems.
- Broadly, duties include planning and implementing policy, collaborating with and supporting stakeholders, allocating justice funding, and assisting victims of crime.
- **County Supervision & PCCD tie-in:** In late 2019, legislation created the County Adult Probation and Parole Advisory Committee (CAPPAC) at PCCD to advise on the administration of county adult probation and parole, adopt standards for probation and parole staff and practices, and develop, oversee, and allocate state funding to support county adult probation and parole operations. Since 2020, we have examined and measured recidivism among county-supervised individuals.

PRESENTATION ROADMAP what we'll cover today

EBP & RISK ASSESSMENT

RECIDIVISM OVERVIEW

RECENT RECIDIVISM STUDIES

ORAS RISK LEVELS & RECIDIVISM

TAKEAWAYS & QUESTIONS

PLEASE
EMAIL WITH
QUESTIONS

WHAT ARE EVIDENCE BASED PRACTICES (EBP)

AND WHY YOU SHOULD CARE

EVIDENCE-BASED PRACTICES a high-level overview

INTERVENTIONS KNOWN TO PRODUCE POSITIVE OUTCOMES

- Evidence-based practices (EBPs) are interventions that produce positive outcomes for individuals involved in the justice system. In turn, positive outcomes for individuals = positive outcomes for the community (e.g. reduced recidivism = increased public safety through reduced victimization).
- **How do we know?** Rigorous scientific research has examined these practices across a diverse number of jurisdictions and justice-involved populations and has concluded that the interventions produce meaningful outcomes.
- **We follow EBPs in our daily lives.** Does brushing teeth improve dental health? Does wearing a seat belt reduce the risk of injuries in automobile accidents?
- **If we know something works, we should apply it.** The justice field is not exempt; following and applying EBPs is better than doing nothing.

EXAMPLES OF EVIDENCE-BASED PRACTICES IN THE JUSTICE FIELD

- **The use of actuarial assessments** (sometimes referred to as risk assessment). These help us determine an individual's strengths, challenges, and the likelihood of their pathway to success.
- **Motivational Interviewing (MI).** Uses counseling to challenge an individual's resistance to change and encourage them to develop internal motivation to change. Implemented correctly (attentive, empathetic, nonjudgmental, empowering, and strength-based), MI achieves recidivism reductions by helping individuals resolve their resistance or ambivalence about behavior change.

RISK ASSESSMENT

AND ITS IMPORTANCE

WHAT IS RISK ASSESSMENT

AND WHY IT IS IMPORTANT

RISK ASSESSMENT a foundational component of pivoting towards implementing evidence-based practices

A CRUCIAL ROADMAP

- Risk assessment instruments help identify criminogenic risk factors underlying behavior and decision making.
- They are the foundational piece to EBP because they inform three key areas (in a more accurate way than subjective judgment alone):
 - 1.) **Criminogenic risk:** the likelihood that an individual may engage in future criminal behavior.
 - 2.) **Criminogenic needs:** factors that research has shown have direct links to reoffending, but can be changed (e.g. dynamic risk factors such as substance dependency or emotional temperament).
 - 3.) **How we can address** those risks and needs: by matching an individual's personality and learning style with appropriate programming/interventions to target the factors that most contribute to their harmful behavior.
- Knowing what areas, such as Cognition (thoughts and beliefs) or Associates (peers who support and normalize illegal behavior), require improvement effects outcomes.
- Risk assessment is a roadmap to effectively find information, and plan a strategy (inclusive of the supervision dosage) towards arriving at a goal (outcome).

AN EXAMPLE OF A RISK ASSESSMENT INSTRUMENT

The ORAS Community Supervision Screening Tool (CSST)

OHIO RISK ASSESSMENT SYSTEM - COMMUNITY SUPERVISION SCREENING TOOL (ORAS-CSST)	
Name: _____	Date of Assessment: _____
Case#: _____	Name of Assessor: _____
1.0 Number of Prior Adult Felony Convictions	<input type="text"/>
0=None	
1=One or Two	
2=Three or More	
2.0 Currently Employed	<input type="text"/>
0=Yes, Full-time, Disabled, or Retired	
1=Not Employed or Employed Part-time	
3.0 Drugs Readily Available in Neighborhood	<input type="text"/>
0=No, Generally Not Available	
1=Yes, Somewhat Available	
2=Yes, Easily Available	
4.0 Criminal Friends	<input type="text"/>
0=None	
1=Some	
2=Majority	
TOTAL SCORE: <input type="text"/>	

MEASURES FOUR DOMAINS:

History of Antisocial Behavior (Static)

Work/School (Dynamic)

Substance Use Problems (Dynamic)

Associates/Peers (Dynamic; greatest influence on future behavior)

RISK ASSESSMENT INFORMS RISK-NEED-RESPONSIVITY

THEY GIVE US GUIDANCE ON "WHO", "WHAT," AND "HOW" TO TARGET RESOURCES

RISK-NEED-RESPONSIVITY (RNR) a guiding model for EBPs

RISK = The "WHO"

- Risk Principle = identify WHO is most at-risk of reoffending, and target our scarce justice resources to focus on those individuals most likely to reoffend.
- Determine risk by looking at static risk factors (e.g. age, criminal history, etc.) which cannot be changed through intervention, and dynamic risk factors (the criminogenic needs), which can be decreased through intervention.
- Scarce resources means we should focus on moderate to high-risk individuals. Low-risk individuals are less likely to reoffend, even absent interventions/programming.

NEED = The "WHAT"

- Need Principle = identify WHAT criminogenic needs, and their ranks (e.g. "top needs" vs. "lesser needs") an individual has, and target resources towards addressing them to help reduce their likelihood of reoffending.
- Examples of criminogenic needs: antisocial attitudes/thoughts/beliefs, family dynamics, temperament/coping skills, etc.

RESPONSIVITY = The "HOW"

- Responsivity Principle = tells us HOW to target interventions by tailoring them to an individual's learning style, abilities, and motivations to best design service delivery and goals.
- Not a "one-size fits all" approach. The best outcomes are achieved when we match interventions (and their intensity) to an individual's risk of reoffending.

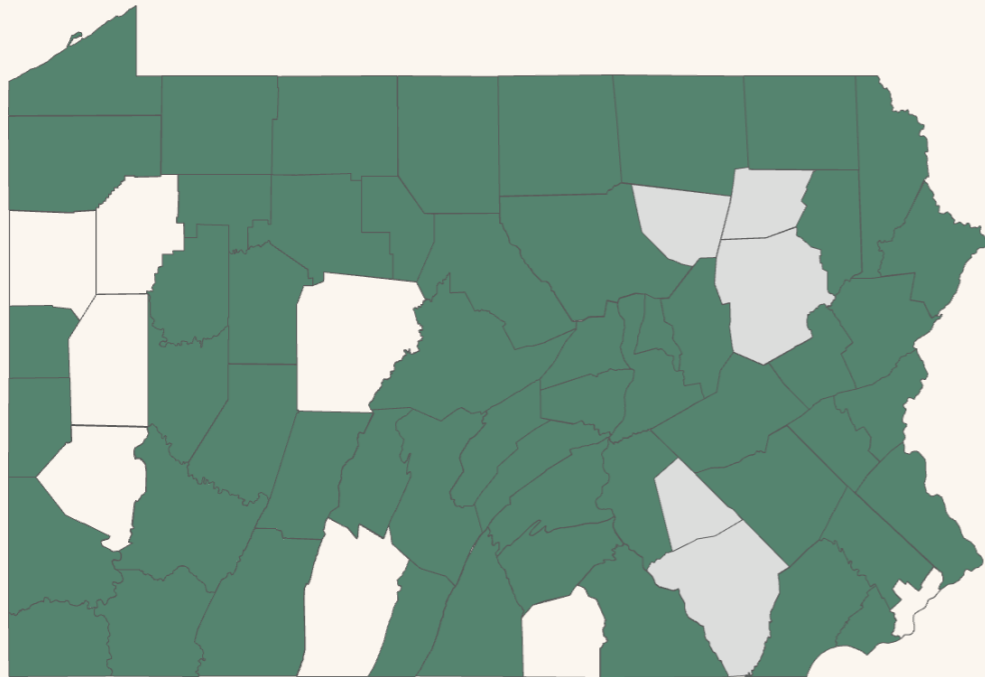
ORAS IS MOST-WIDELY USED RISK ASSESSMENT

WITHIN PENNSYLVANIA'S ADULT COUNTY PROBATION/PAROLE OFFICES

RISK ASSESSMENT within county supervision operations

COUNTIES USING ORAS

- Nearly all county adult probation/parole offices employ risk assessment instruments, but 59 counties currently use (green-highlighted), or will soon be using (gray-highlighted), the ORAS to identify risk and needs.
- The two most-used tools are the 4-question Screening Tool (CSST) and the nearly 40-question Community Supervision Tool (CST). CSST is intended to screen for individuals greater than Low Risk, and counties then tend use the CST to better assess risk on those individuals.



ORAS COMMUNITY SUPERVISION TOOL (CST)

Peer Associations & Criminal Attitudes and Behavioral Patterns Domains

6.0 PEER ASSOCIATIONS

6.1 Criminal Friends	<input type="text"/>
0=None	
1=Some	
2=Majority	
6.2 Contact with Criminal Peers	<input type="text"/>
0=No Contact with Criminal Peers	
1=At Risk of Contacting Criminal Peers	
2=Contact or Actively Seeks Out Criminal Peers	
6.3 Gang Membership	<input type="text"/>
0=No, Never	
1=Yes, but Not Current	
2=Yes, Current	
6.4 Criminal Activities	<input type="text"/>
0=Strong Identification with Prosocial Activities	
1=Mixture of Pro- and Antisocial Activities	
2=Strong Identification with Criminal Activities	
Total Score for Peers: <input type="text"/>	

7.0 CRIMINAL ATTITUDES AND BEHAVIORAL PATTERNS

For the Following Items Please Rate the Offender:

7.1 Criminal Pride	<input type="text"/>
0=No Pride in Criminal Behavior	
1=Some Pride	
2=A Lot of Pride	
7.2 Expresses Concern about Others' Misfortunes	<input type="text"/>
0=Concerned about Others	
1=Limited Concern	
2=No Real Concern for Others	
7.3 Feels Lack of Control Over Events	<input type="text"/>
0=Controls Events	
1=Sometimes Lacks Control	
2=Generally Lacks Control	
7.4 Sees No Problem in Telling Lies	<input type="text"/>
0=No	
1=Yes	
7.5 Engages in Risk Taking Behavior	<input type="text"/>
0=Rarely Takes Risks	
1=Sometimes Takes Risks	
2=Generally Takes Risks	
7.6 Walks Away from a Fight	<input type="text"/>
0=Yes	
1=Sometimes	
2=Rarely	
7.7 Believes in "Do Unto Others Before They Do Unto You"	<input type="text"/>
0=Disagree	
1=Sometimes	
2=Agrees	

Total Score Criminal Attitudes and Behavioral Patterns:

RISK ASSESSMENT

HELPS US APPROXIMATE THE LIKELIHOOD OF RECIDIVISM

RECIDIVISM

A QUICK WORD ABOUT THIS IMPORTANT OUTCOME

RECIDIVISM

WHAT IT IS AND WHY IT IS IMPORTANT

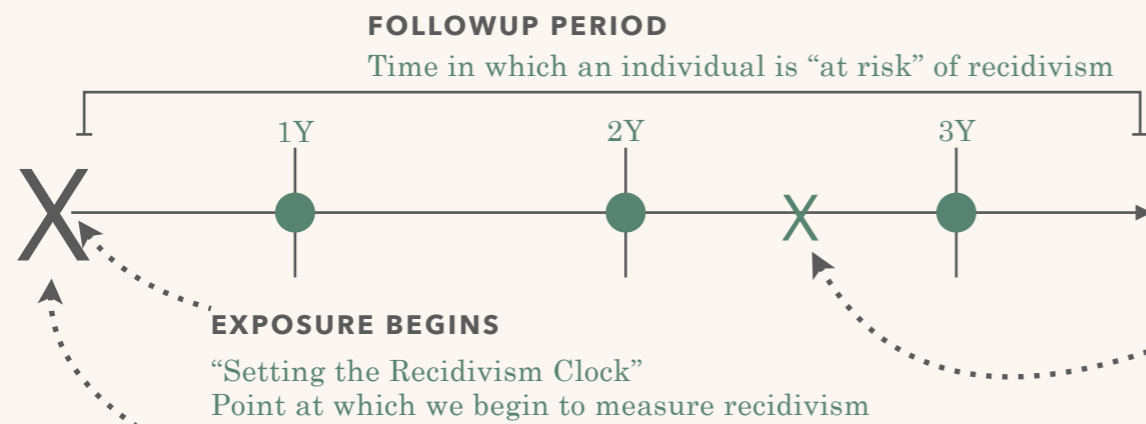
RECIDIVISM 101 arguably one of the most important and fundamental outcomes in criminal justice

A RETURN TO CRIMINAL BEHAVIOR

- Following an individual receiving a sanction, or participating in a program/intervention, for a prior crime.
- Various definitions to measure what events (e.g. rearrest, reincarceration, reconviction, etc.) qualify as recidivism.
- Important in understanding the effectiveness of sanctions, programs, etc. as they relate to increasing (deterrent effect), decreasing (criminogenic effect), or having no impact (null effect) on public safety. Also, recidivism has public funding implications (e.g. increased prison recidivism = increased inmate population = increased correctional costs).
- Recidivism = event-based short term measure of failure. Desistance = event-absent long term measure of success.

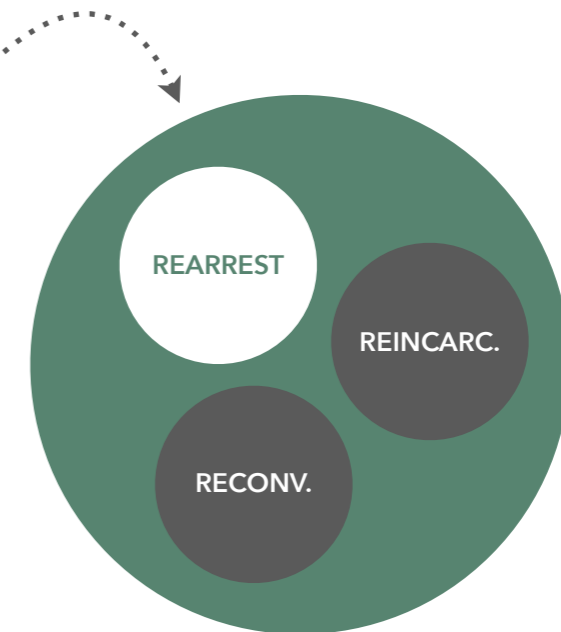
MEASURING RECIDIVISM a fraction-producing model

• OBSERVATION



TREATMENT/INTERVENTION

Sanctions (e.g. Jail, Probation, etc.)
Program (D&A treatment, counseling, etc.)



PPCJI: STRATEGIC PLAN AIMED AT RECIDIVISM REDUCTION

BY UNDERSTANDING, ADOPTING, AND IMPLEMENTING EVIDENCE-BASED PRACTICES

STRATEGIC PLAN GOALS of PPCJI’s evidence-based practices strategic plan, 2023-2025

GOAL ONE: IMPLEMENTATION

- Provide tools to steer counties’s EBP implementation efforts by developing strategies and tools to assist counties in implementing and evaluating EBP efforts.

GOAL TWO: TRAINING

- Develop a statewide EBP training plan through eLearning and in-person training courses that is sustainable (e.g. “train-the-trainer” model), and is continuously improving in quality.

GOAL THREE: EFFECTIVE INTERVENTIONS

- Support counties in identifying and implementing effective interventions to reduce risk and enhance community well-being. This includes implementing a standardized case planning/success planning process statewide and assisting counties in assessing the extent to which their interventions faithfully align with evidence-based practices and strategies.

GOAL FOUR: COMMUNICATIONS

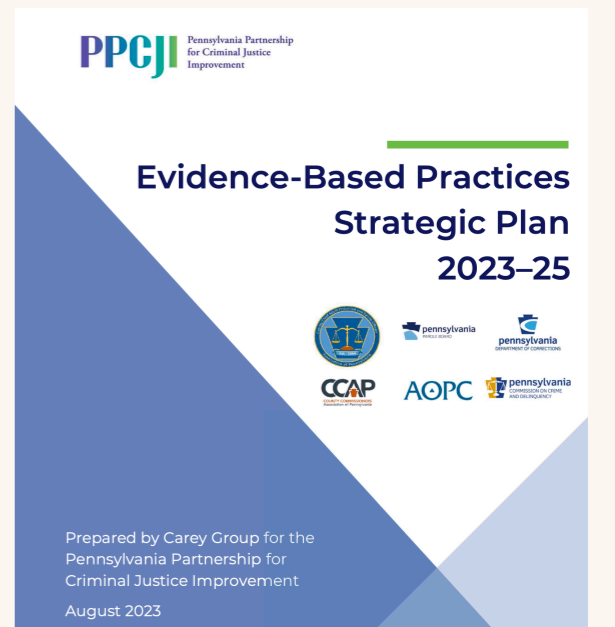
- Enhance people’s understanding and use of EBPs by developing a communications plan to assist with the successful implementation of EBPs while also understanding the implementation experiences of stakeholders to inform future implementation efforts.

GOAL FIVE: DATA AND QUALITY ASSURANCE

- Collect and use data to inform and strengthen EBPs to ensure fidelity to implementation.

PPCJI and its partners

- Part of the County Chief Adult Probation & Parole Officers Association of Pennsylvania (CCAPPOAP).
- Works with Chiefs, AOPC, DOC, PBPP, CCAP, and PCCD to promote the use and implementation of EBPs to reduce recidivism.
- Click below to view PPCJI’s EBP implementation efforts.



RISK ASSESSMENTS

ARE ONLY AS GOOD AS
THEIR ABILITY TO IDENTIFY THE
LIKELIHOOD FOR RECIDIVISM

**TO UNDERSTAND THE EFFICACY
OF A RISK ASSESSMENT TOOL**

**RECIDIVISM MUST
BE MEASURED**

**THEN WE KNOW HOW WELL (OR VALID) THE TOOL
PREDICTS THE RECIDIVISM RISK.**

BASELINING RECIDIVISM IN SEVEN PA COUNTIES

AMONG INDIVIDUALS ENTERING COUNTY SUPERVISION IN 2016

DEFINING RECIDIVISM

REARREST FOR NEW CHARGE

- First instance of rearrest for any new criminal charge following an individual starting county supervision.

KEY FINDINGS from the study

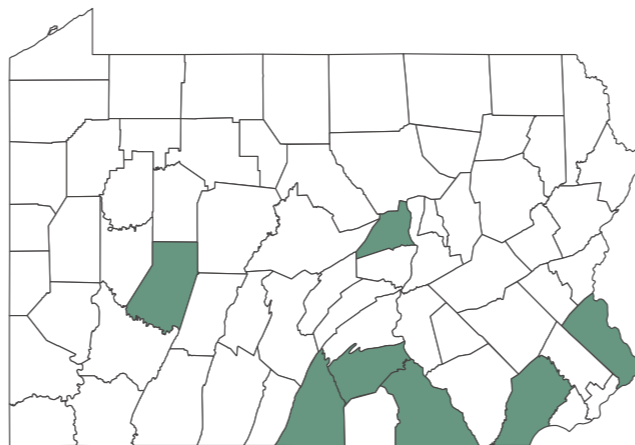
35% RECIDIVISM OVER 5Y

- 35.5% of the 12,205 county supervised individuals were rearrested within 5 years of starting supervision within 7 counties.
- York Co. had the lowest rates of all counties studied, with a 27% rearrest rate within 5 years.

REARREST CHARGES

- 3 out of 4 (73.5%) individuals rearrested were rearrested on a Misdemeanor, and 14% were rearrested for a Violent charge. York Co. rearrests: 70% Misdemeanor, and 10% Violent charge.

ABOUT THE STUDY our attempt to begin baselining recidivism in county supervision

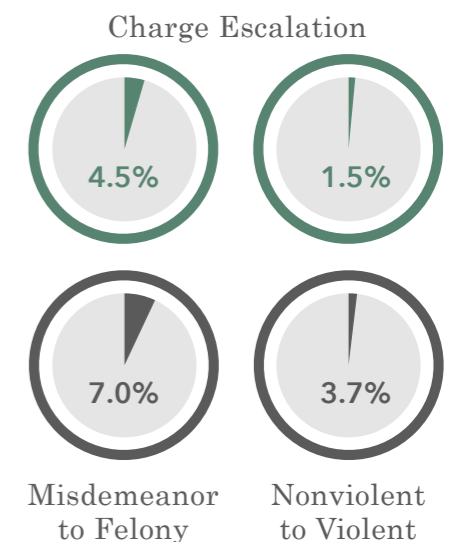
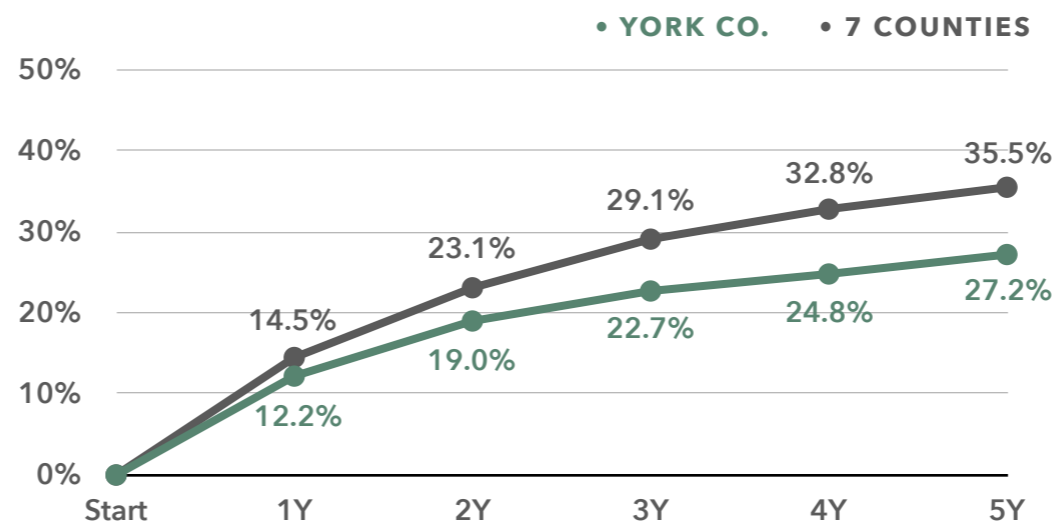


PART OF A FEDERAL GRANT PROJECT BASELINING RECIDIVISM IN SEVEN PA COUNTIES

12,205 individuals entering supervision in 2016 were studied. Nearly a quarter (23.3%) of those were in York Co. (n=2,846).

We worked with Adult Probation Offices to gather county-collected data, and then matched onto individual state criminal history records.

RECIDIVISM RATES over a five-year followup period for 12,000+ individuals



RECIDIVISM IN YORK CO.

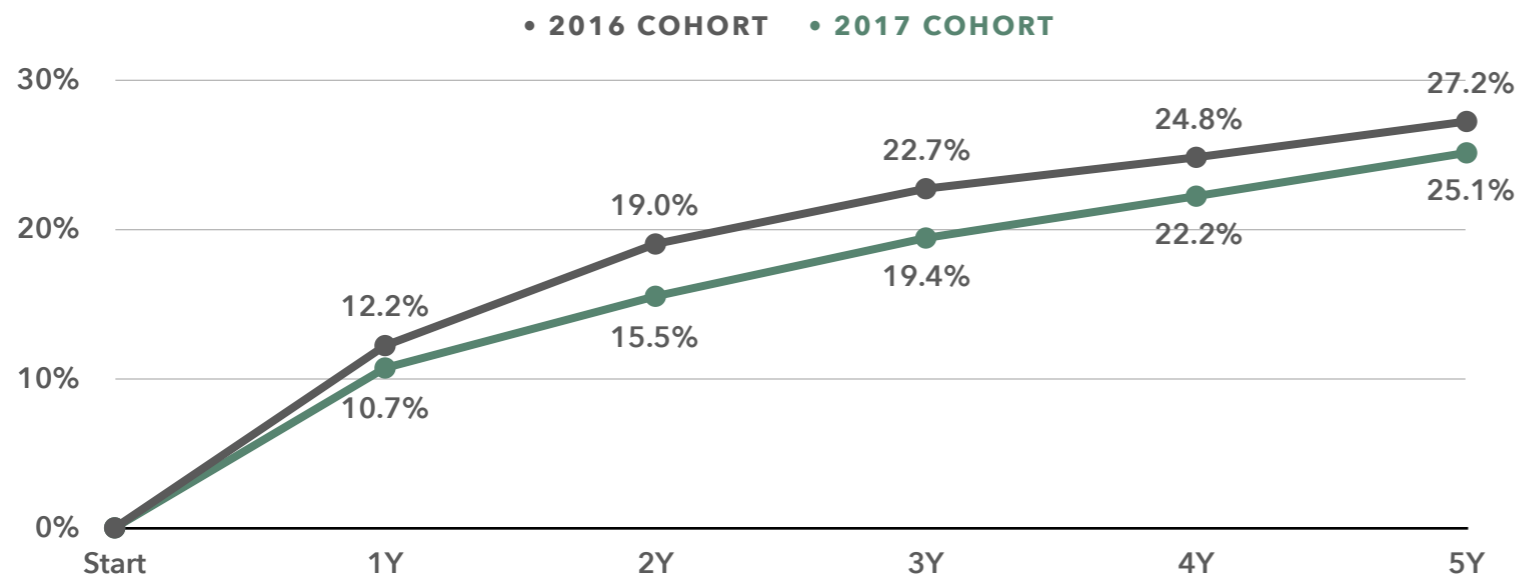
AMONG INDIVIDUALS ENTERING COUNTY SUPERVISION IN 2016 & 2017

KEY FINDINGS from looking at two subsequent yearly cohorts

RECIDIVISM REDUCTION

- 1Y rearrest decreases to 10.7% (2017) vs. 12.2% (2016).
- 3Y rearrest decreases to 19.4% (2017) vs. 22.7% (2016).
- 5Y rearrest decreases to 25.1% (2017) vs. 27.2% (2016).
- Both cohorts have similar characteristics (no sharp divergence) and similar rearrest rates, but the earlier cohort had worse outcomes.
- Charge escalation among Misdemeanor individuals in 2017 to Felony rearrests drops to 4.2% over 5 years (from 4.5% in the 2016 cohort). Shows the later cohort, in the aggregate, also made gains in being rearrested on less serious charges.

RECIDIVISM RATES over a five-year followup period in York Co.



DESCRIPTIVE STATISTICS

York Co. Individuals Entering County Supervision

Subgroup (York Co.)	2016	2017
<i>n</i>	2,846	2,072
<i>Gender</i>		
Male	73%	72%
Female	27%	28%
<i>Race</i>		
White	77%	75%
Nonwhite	23%	25%
<i>Age</i>		
Under 26	26%	26%
26 & Over	74%	74%
<i>Lead Charge Grade</i>		
S or M	76%	79%
Felony	24%	21%
<i>Lead Charge Category</i>		
DUI	31%	29%
Drugs	23%	25%
Property	20%	19%
Public Order	14%	15%
Violent	10%	10%
Weapons	2%	2%
<i>Prior Arrests</i>		
2 or Less	57%	53%
3 or More	43%	47%

YORK: AN OUTLIER?

OR ARE OTHER COUNTIES SEEING REDUCED RECIDIVISM?

RECIDIVISM IN A SIMILAR CLASS 3 COUNTY

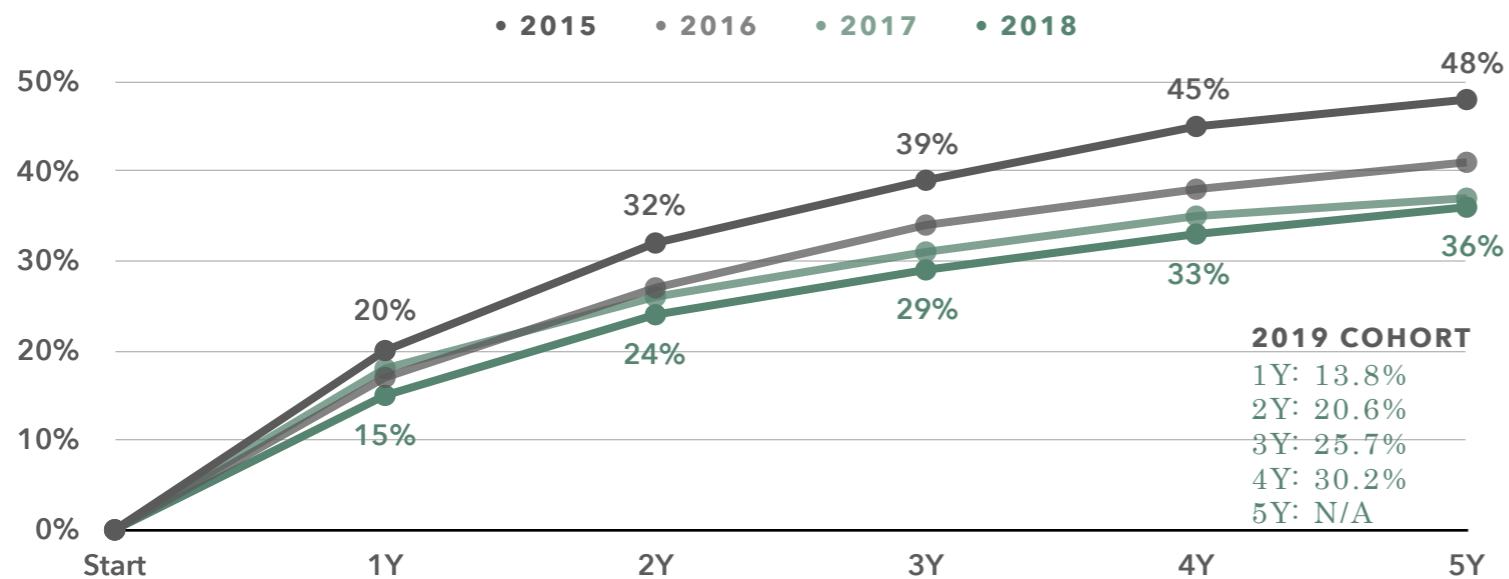
AMONG INDIVIDUALS ENTERING COUNTY SUPERVISION IN 2015 THROUGH 2018

KEY FINDINGS of a study where we had more subsequent cohorts

RECIDIVISM REDUCTION

- 1Y rearrest is 15% for 2018 cohort vs. 20% for 2015 cohort (-5 pp).
- 3Y rearrest is 29% for 2018 cohort vs. 39% for 2015 cohort (-10 pp).
- 5Y rearrest is 36% for 2018 cohort vs. 48% for 2015 cohort (-12 pp).
- Clearly defined trend: subsequent-year cohorts are less criminogenic than prior-year cohorts at nearly every observation point.

RECIDIVISM RATES over a five-year followup period in a similar Class 3 Co.



DESCRIPTIVE STATISTICS

Similar Class 3 Co.'s Individuals Entering County Supervision

Subgroup	2015	2016	2017	2018
<i>n</i>	3,856	3,390	2,983	2,870
<i>Gender</i>				
Male	76%	74%	75%	73%
<i>Race</i>				
White	68%	71%	67%	68%
<i>Age</i>				
Under 26	31%	30%	29%	28%
<i>Lead Charge Grade</i>				
S or M	83%	87%	88%	89%
<i>Lead Charge Cat.</i>				
DUI	32%	31%	30%	33%
Drugs	22%	23%	24%	25%
Property	24%	22%	20%	18%
Public Order	12%	13%	13%	12%
Violent	10%	10%	12%	10%
Weapons	1%	1%	1%	2%

2019 COHORT
 1Y: 13.8%
 2Y: 20.6%
 3Y: 25.7%
 4Y: 30.2%
 5Y: N/A

THE DATA POSES A QUESTION

**ARE SUBSEQUENT COHORTS NATURALLY LESS
CRIMINOGENIC?**

OR

**IS THERE SOME INTERVENTION(S) OCCURRING WITHIN
COUNTY SUPERVISION THAT IS POSITIVELY EFFECTING
THE LIKELIHOOD OF RECIDIVISM?**

OUR WORKING HYPOTHESIS
RISK ASSESSMENT AND EBPs
ARE REDUCING RECIDIVISM

**AS COUNTIES MAKE GREATER USE OF RISK
ASSESSMENTS, AND SCALE-OUT EBP IMPLEMENTATION,
WE SHOULD SEE RECIDIVISM REDUCTION OVER TIME.**

RISK ASSESSMENT IS KEY

BECAUSE IT INFORMS SUPERVISION STRATEGIES & EBPs

THUS WE MUST EVALUATE

**THE USE OF RISK ASSESSMENTS TO UNDERSTAND WHETHER
THEY ARE PREDICTIVE OF RECIDIVISM**

CONNECTING ORAS RISK ASSESSMENT TO RECIDIVISM

TO UNDERSTAND WHETHER RISK LEVELS ARE PREDICTIVE OF RECIDIVISM

DEFINING RECIDIVISM

REARREST FOR NEW CHARGE

- First instance of rearrest for any new criminal charge following an individual starting county supervision.

KEY FINDINGS from the study

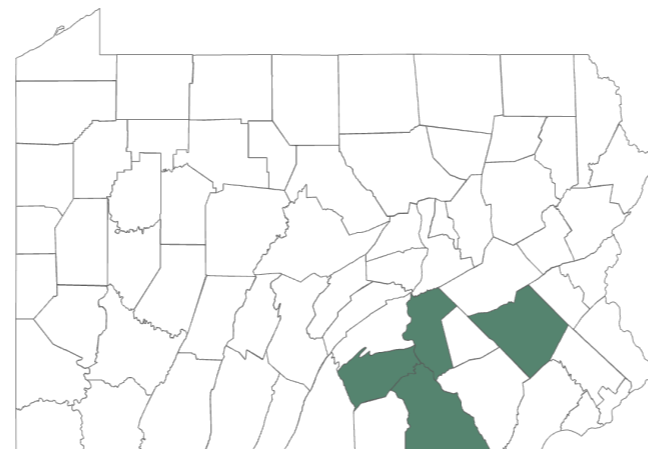
CSST & LOW RISK INDIVIDUALS

- The CSST (screen) consistently identified Low-risk individuals across various demographics and characteristics.
- Low-risk individuals had less than half the 1Y recidivism rates than moderate/high-risk individuals (7% vs. 17%). Those gaps persist out to five years (23% vs. 41%).

CST & HIGHER-RISK INDIVIDUALS

- The CST clearly identifies higher-risk individuals that recidivate at much higher rates (28% 1Y; 66% 5Y) compared to lower-risk individuals (11% 1Y; 35% 5Y).

ABOUT THE STUDY matching risk level to recidivism in county supervision



FOUR CLASS 3 COUNTIES

Berks Cumberland Dauphin York

PART OF A FEDERAL GRANT PROJECT CONNECTING ORAS RISK ASSESSMENT TO RECIDIVISM IN FOUR PA COUNTIES

7,790 individuals entering supervision in 2017 were studied, and 3,767 (48%) were assessed with the CSST or CST for risk/needs.

Three of the four counties also participated in an additional federal grant project which saw them boost and reinforce EBP implementation, and are slated to be evaluated on recidivism among their 2022 and 2023 cohorts (compared to their 2017 cohort).

GOALS OF STUDY what we accomplished

#1

EXAMINE THE PREDICTIVE VALIDITY OF ORAS TOOLS AS IT RELATES TO COUNTY SUPERVISION TO AID IN EXTENDING EBP RESEARCH EFFORTS.

#2

MOVE BEYOND PREVIOUS STUDIES, BY EXAMINING RECIDIVISM OVER A LONGER TIMEFRAME (5 YEARS), ACROSS MORE SUBGROUPS (GENDER, RACE, AGE, LEAD CHARGE GRADE & CATEGORY, AND PRIOR ARRESTS), AND PARTIALLY THROUGH A UNIQUE LENS (CHARGE ESCALATION).

RISK-ASSESSED INDIVIDUALS

AND THE ORAS TOOLS THAT ASSESSED THEM

DESCRIPTIVE STATISTICS

Percentages of Individuals, By Characteristics, Receiving Risk Assessments

4-County Subgroups	CSST	CST	Neither	n	York Co. Subgroups	CSST	CST	Neither	n
All	23%	25%	52%	7,790	All	48%	5%	48%	2,072
<i>Gender</i>					<i>Gender</i>				
Male	22%	25%	54%	5,757	Male	45%	6%	49%	1,489
Female	28%	26%	46%	2,033	Female	55%	2%	44%	583
<i>Race</i>					<i>Race</i>				
White	23%	27%	50%	5,832	White	50%	5%	45%	1,541
Nonwhite	24%	19%	56%	1,958	Nonwhite	40%	6%	55%	523
<i>Age</i>					<i>Age</i>				
Under 26	25%	25%	50%	1,930	Under 26	47%	5%	48%	536
26 & Over	23%	25%	52%	5,860	26 & Over	48%	5%	47%	1,536
<i>Lead Charge Grade</i>					<i>Lead Charge Grade</i>				
S or M	24%	24%	53%	6,275	S or M	48%	4%	49%	1,644
Felony	21%	31%	47%	1,515	Felony	48%	9%	43%	428
<i>Lead Charge Category</i>					<i>Lead Charge Category</i>				
DUI	21%	18%	61%	2,247	DUI	49%	3%	49%	595
Drugs	24%	27%	49%	1,588	Drugs	41%	6%	53%	525
Property	22%	29%	49%	1,748	Property	49%	5%	46%	388
Public Order	24%	24%	52%	1,172	Public Order	46%	6%	48%	311
Violent	27%	32%	41%	929	Violent	57%	7%	35%	215
Weapons	35%	29%	36%	106	Weapons	66%	3%	32%	38
<i>Prior Arrests</i>					<i>Prior Arrests</i>				
2 or Less	28%	21%	51%	3,036	2 or Less	47%	3%	50%	1,096
3 or More	20%	28%	52%	4,754	3 or More	49%	7%	44%	976
n	1,812	1,955	4,023		n	986	103	983	

ORAS RISK ASSESSMENT TOOL AND RECIDIVISM

AMONG INDIVIDUALS ENTERING SUPERVISION IN 2017

RECIDIVISM RATES by ORAS assessment tool

CSST vs CST & RECIDIVISM

- The overall recidivism rate for individuals assessed with the CSST was 14% at 1Y and 35% at 5Y, slightly higher than those assessed in York Co. (11% 1Y; 25% 5Y).
- In the 4-county sample, and in York Co., individuals assessed with the CST had consistently higher recidivism rates at every point than those assessed with the CSST. The 1Y CST recidivism rate was 18% in the four counties, and 13% in York Co. At Year 5, it was 47% in the four counties, and 33% in York Co.

IDENTIFYING FACE VALIDITY

- The recommended practice for ORAS assessment is that those who score Moderate/High on the CSST should also be assessed with the CST, thus it makes sense to find those assessed with the CST are more criminogenic. Good evidence of “face validity.”

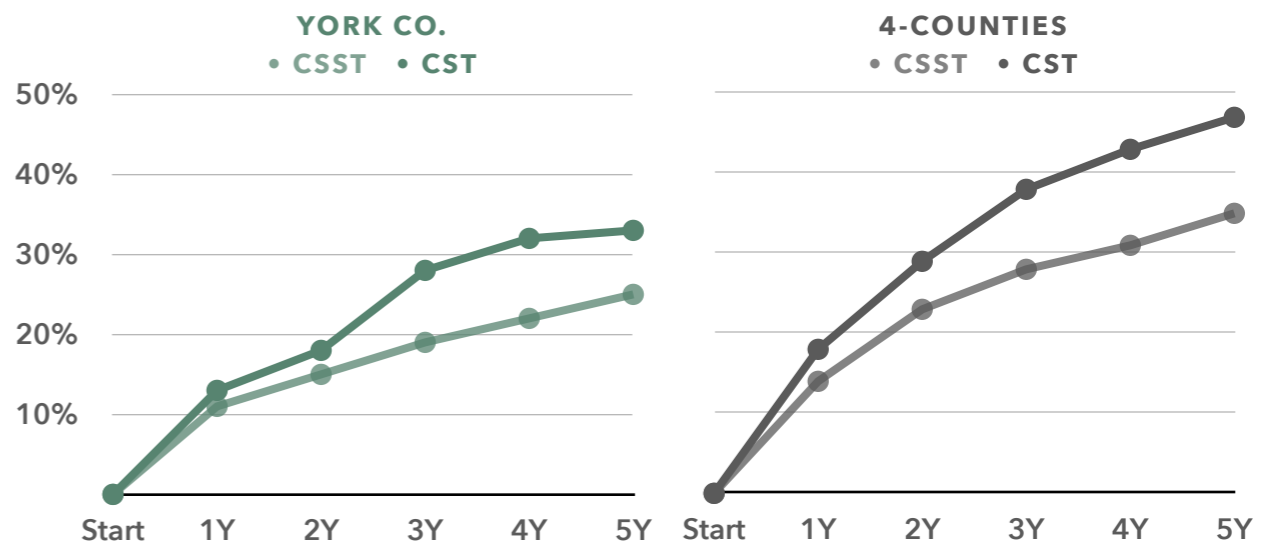
THOSE NOT ASSESSED

- The majority of individuals (52%; n=4,023) in the four counties and a near-majority in York Co. (48%; n=983) did not receive a risk assessment with either the CSST or CST. Or if they did, the data was not recorded.
- An interesting finding was that in the four counties, those not assessed were the most criminogenic at the 1Y followup period (19% rearrest).

RECIDIVISM BY RISK ASSESSMENT TOOL

Over five years, in York Co. and the 4-counties (Berks, Cumberland, Dauphin, & York)

Recidivism	York Co.			4-Counties		
	CSST	CST	Neither	CSST	CST	Neither
1Y	11%	13%	11%	14%	18%	19%
2Y	15%	18%	15%	23%	29%	27%
3Y	19%	28%	18%	28%	38%	33%
4Y	22%	32%	21%	31%	43%	38%
5Y	25%	33%	24%	35%	47%	41%
<i>n</i>	986	103	983	1,812	1,955	4,023



CSST (9Q SCREEN)

RISK LEVELS & RECIDIVISM RATES

WITH A SPECIAL SHOWCASE OF YORK CO. DATA

CSST RISK LEVELS & RECIDIVISM

IN YORK CO. & THE FOUR COUNTIES

KEY FINDINGS among those assessed with the CSST

LOW RISK = LESSENERED RECIDIVISM

- Moderate/High risk individuals had over 2x the recidivism rates of Low risk individuals at 1Y (18% vs. 7%) in the four counties. This theme is consistent with York Co.'s individuals (13% vs. 5%).
- At 5Y, the recidivism rate gap difference narrows to 31% vs. 14% in York Co. and 41% vs 23% in the four counties. Face validity remains.
- Worth mentioning: individuals receiving no CSST had higher recidivism rates than Low risk individuals at every observation point. At 1Y, unassessed individuals had a higher recidivism rate than even Mod/High risk individuals in the four counties.

1Y REARREST CHARGES

- Among those rearrested by 1Y, Low Risk individuals were less likely to be rearrested on a lead charge graded as Felony (18% vs. 29%) compared to Mod/High risk individuals in the four counties. Additional face validity evidence re: the seriousness of future crime.

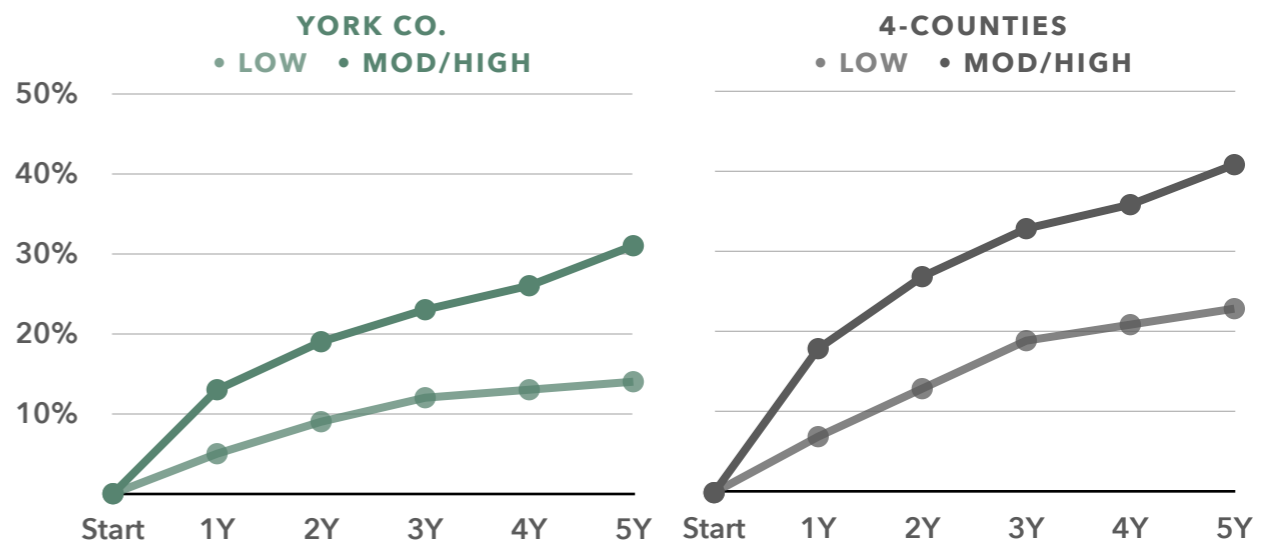
PREDICTIVE VALIDITY using logistic regression

- Clear predictive power of CSST on recidivism. Those assessed as moderate/high have 2.9 times the odds of recidivating by one year and 2.3 times the odds by five years compared to those assessed as low risk (both odds statistically significant at $p < .0001$)

RECIDIVISM BY CSST RISK LEVEL

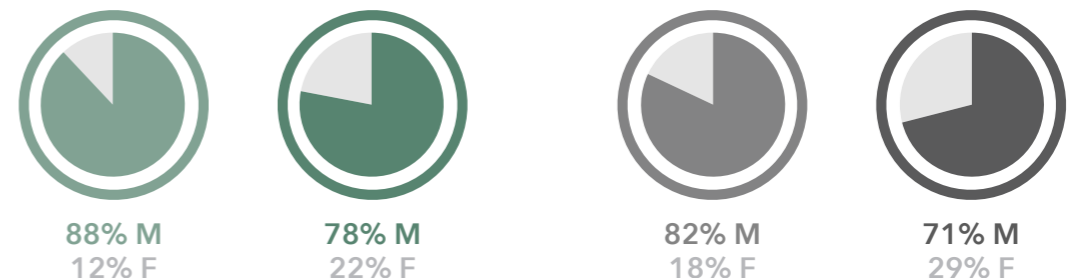
Among Low-Risk, Moderate/High-Risk, and individuals not receiving the CSST

Recidivism	York Co.			4-Counties		
	Low	Mod/High	No CSST	Low	Mod/High	No CSST
1Y	5%	13%	11%	7%	18%	19%
2Y	9%	19%	15%	13%	27%	27%
3Y	12%	23%	18%	19%	33%	33%
4Y	13%	26%	21%	21%	36%	38%
5Y	14%	31%	24%	23%	41%	41%
<i>n</i>	312	674	983	636	1,279	4,023



1Y RECIDIVISM: LEAD REARREST CHARGE

Misdemeanor (or Less) vs. Felony, among individuals rearrested



SUBGROUP RECIDIVISM

CSST: BY DEMOGRAPHICS

KEY SUBGROUP FINDINGS among the CSST-assessed

RECIDIVISM BY GENDER

- Males in the 4 counties have higher recidivism rates than females, and Mod/High risk males have the higher recidivism rates compared to Low risk males (18 % vs. 7% 1Y; 42% vs. 23% 5Y).
- In York Co., females have slightly higher recidivism rates than males, but aligns with greater risk scores having greater recidivism.

RECIDIVISM BY RACE

- Low risk white individuals in the four counties had 6% 1Y and 21% 5Y recidivism, compared to Mod/High risk white individuals (15% 1Y; 38% 5Y).
- Low risk nonwhite individuals in the four counties had 9% 1Y and 29% 5Y recidivism, compared to Mod/High risk nonwhite individuals (23% 1Y; 48% 5Y).

RECIDIVISM BY AGE

- Younger Low Risk individuals in the four counties had 12% 1Y and 26% 5Y recidivism, compared to Mod/High risk younger individuals (24% 1Y; 52% 5Y).
- Older Low Risk individuals in the four counties had 5% 1Y and 22% 5Y recidivism, compared to Mod/High risk older individuals (15% 1Y; 36% 5Y).

YORK CO.

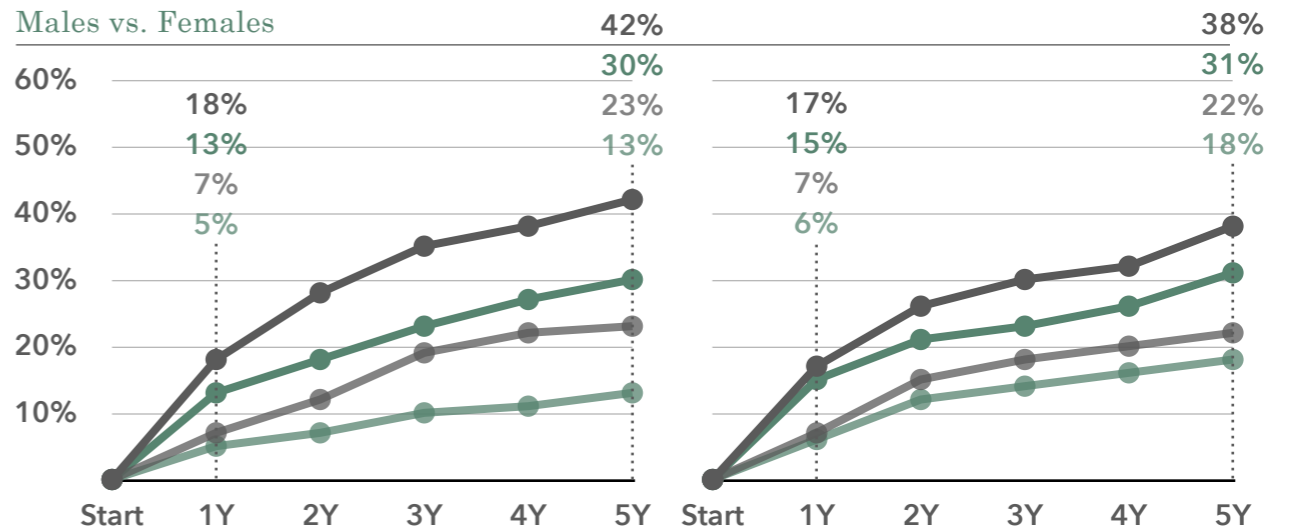
• LOW • MOD/HIGH

4-COUNTIES

• LOW • MOD/HIGH

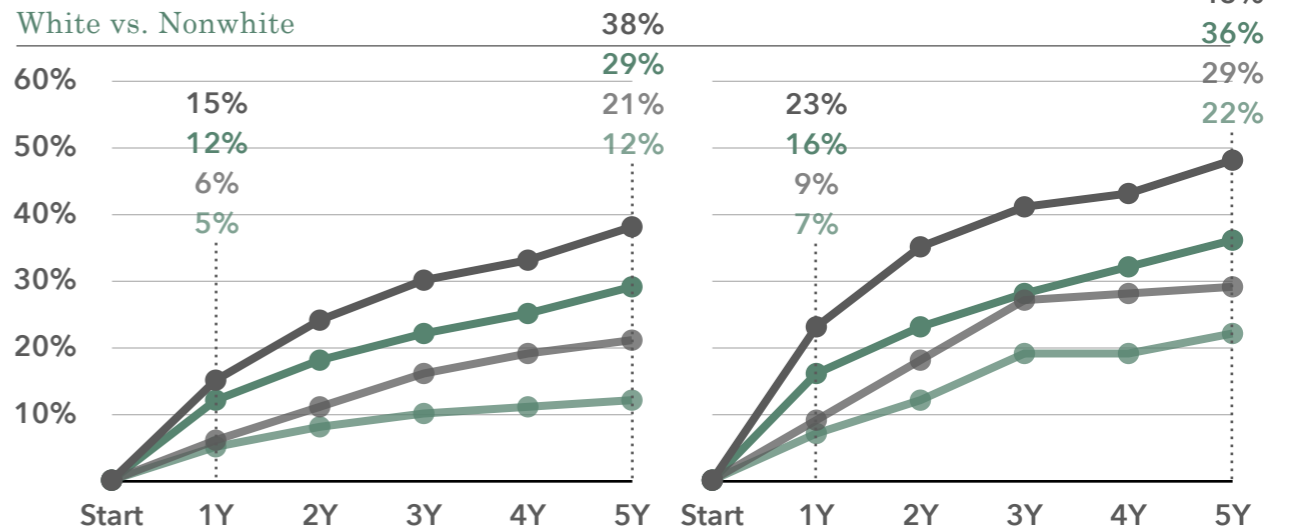
GENDER

Males vs. Females



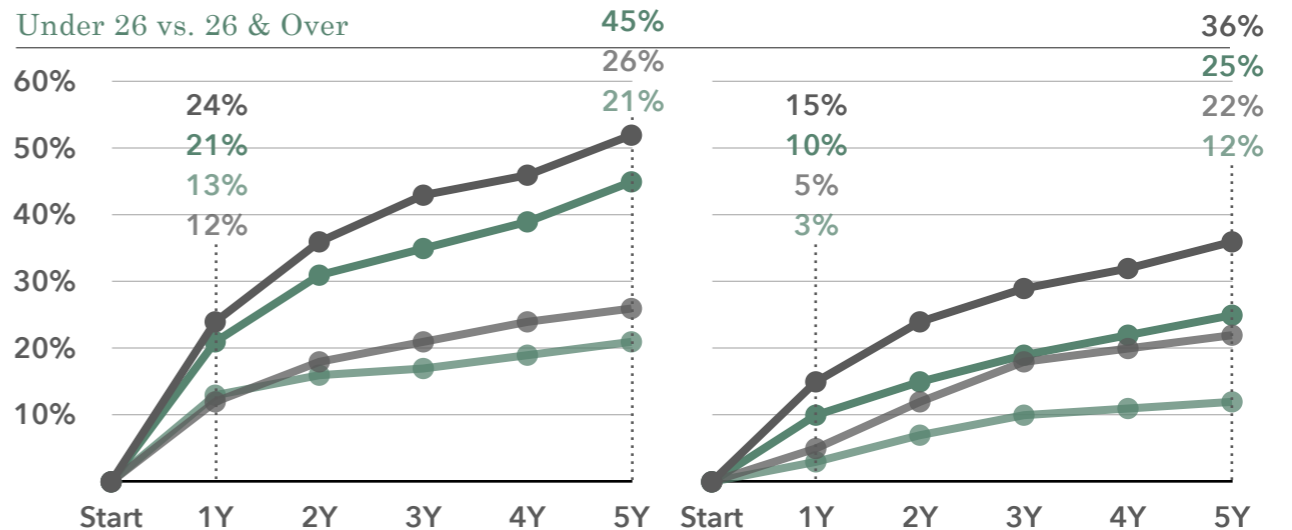
RACE

White vs. Nonwhite



AGE

Under 26 vs. 26 & Over



SUBGROUP RECIDIVISM

CSST: BY CRIMINAL HISTORY & LEAD CHARGE

KEY SUBGROUP FINDINGS among the CSST-assessed

RECIDIVISM BY PRIOR ARRESTS

- 4-counties: Low-risk individuals with 2 or less prior arrests have lower 1Y recidivism rates than Mod/High-risk (7% vs. 12%). York: (6% vs. 9%).
- 4-counties: Mod/High-risk individuals with 3 or more prior arrests are 3x as likely to recidivate in 1Y than Low-risk (21% vs. 7%). York: 4x (4% vs. 16%).

RECIDIVISM BY LEAD CHARGE GRADE

- 4-counties: Mod/High-risk individuals with a M (or less) charge are 2.5x as likely to recidivate in 1Y than Low-risk (13% vs. 5%). York: 2x (17% vs. 7%).
- 4-counties: Mod/High-risk individuals with a F charge are 3x as likely to recidivate in 1Y than Low-risk (19% vs. 6%). York: 3x (15% vs. 5%).

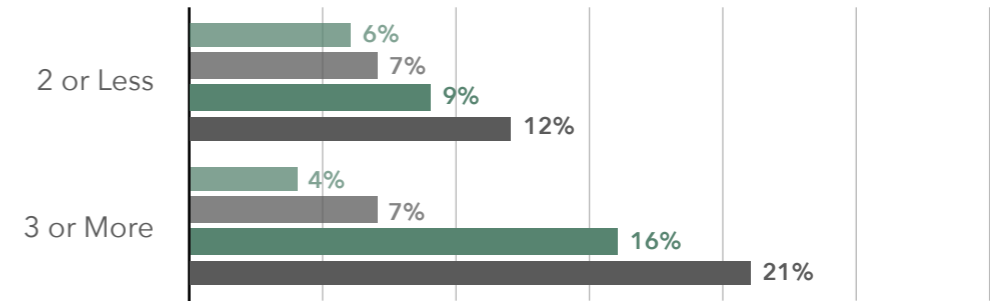
RECIDIVISM BY LEAD CHARGE CATEGORY

- 4-counties: Mod/High-risk individuals with a DUI charge are 2.5x as likely to recidivate in 1Y than Low-risk (10% vs. 4%). York: 2.5x (10% vs. 4%).
- 4-counties: Mod/High-risk individuals with a Drug charge are nearly 2x as likely to recidivate in 1Y than Low-risk (15% vs. 8%). York: equal (9% vs. 9%).
- 4-counties: Mod/High-risk individuals with a Property charge are nearly 3x as likely to recidivate in 1Y than Low-risk (27% vs. 10%). York: 3x (24% vs. 7%).
- 4-counties: Low-risk individuals with a Violent charge have lower 1Y recidivism rates than Mod/High-risk (8% vs. 13%). York: half as likely to recid. (5% vs. 11%).

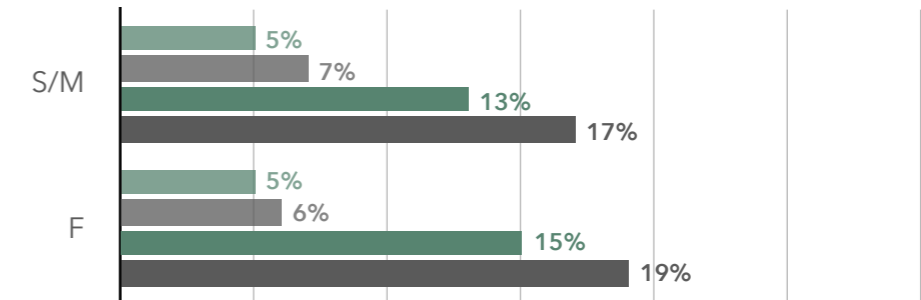
YORK CO. 4-COUNTIES
 • LOW • MOD/HIGH • LOW • MOD/HIGH

CSST 1Y RECIDIVISM By Criminal History & Lead Charge

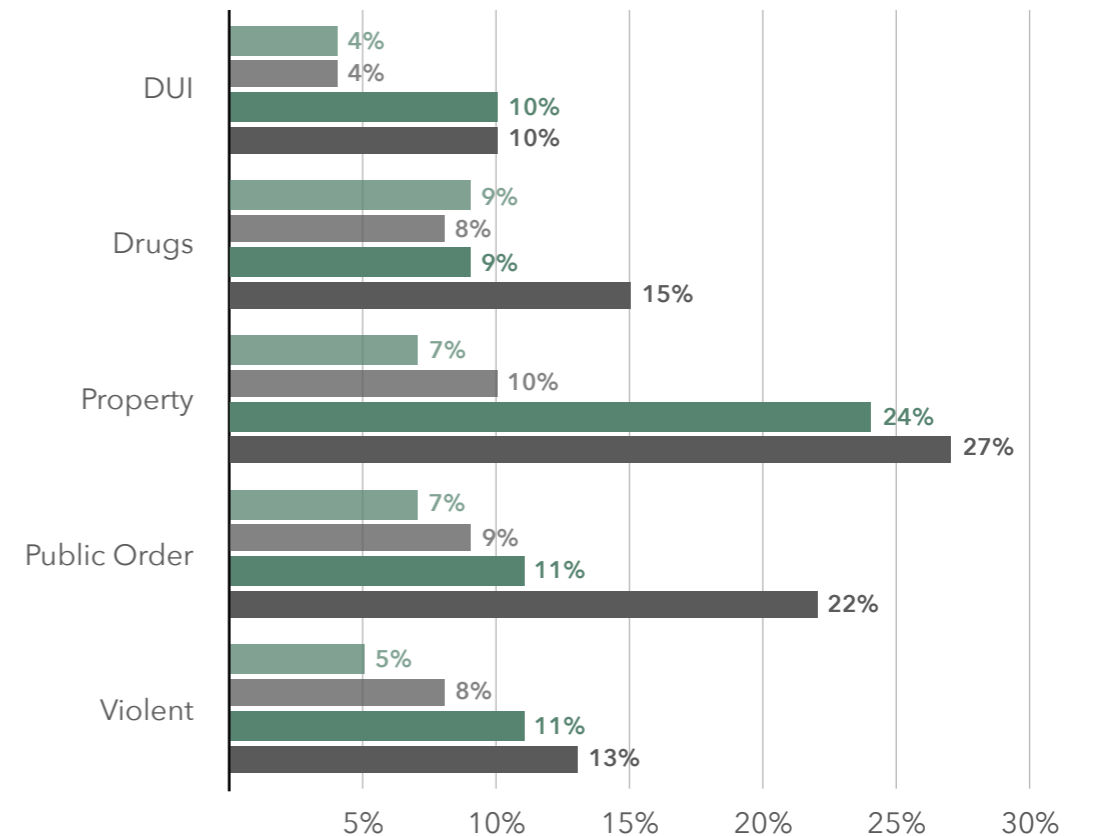
PRIOR ARRESTS



LEAD CHARGE GRADE



LEAD CHARGE CATEGORY



CHARGE ESCALATION

UPON REARREST AMONG CSST-ASSESSED

Measure #1

VIOLENT CHARGE ESCALATION

Nonviolent-charged individuals whose first rearrest is for a Violent charge

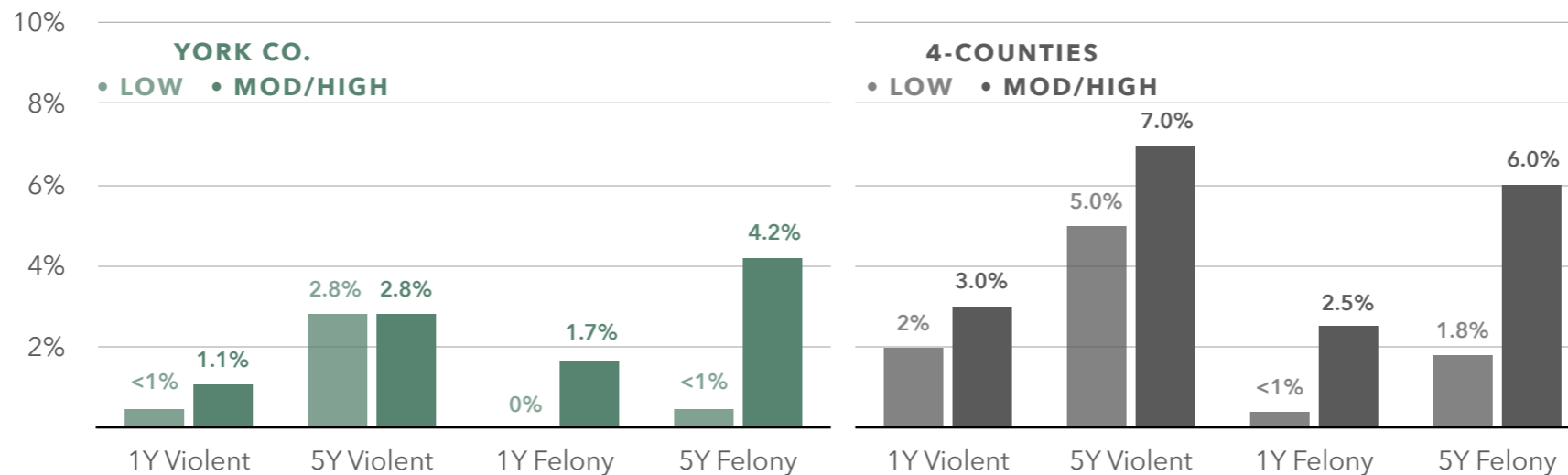
Measure #2

FELONY CHARGE ESCALATION

Misdemeanor-charged individuals whose first arrest is for a Felony charge

CSST CHARGE ESCALATION RECIDIVISM

At 1 & 5 Years, for nonviolent-charged individuals and misdemeanor (or less)-charged individuals to assess escalation



CST (35Q TOOL)

RISK LEVELS & RECIDIVISM RATES

ONLY LOOKING AT FOUR-COUNTY DATA

CST RISK LEVELS & RECIDIVISM

IN THE FOUR COUNTIES

KEY FINDINGS among those assessed with the CST

LOW RISK = LESSENERED RECIDIVISM

- Moderate-risk individuals had 2x the recidivism rates of Low-risk individuals at 1Y (22% vs. 11%) in the four counties. By 5Y, High-risk individuals have nearly 2x the recidivism rates of Low-risk individuals (66% vs. 35%) and have a recidivism rate that is 11 percentage points greater than Moderate-risk individuals (66% vs. 55%). Face validity remains.
- Worth mentioning: similar to what was found with the CSST, individuals receiving no CST had higher recidivism rates than Low risk individuals at every observation point.

1Y REARREST CHARGES

- Among individuals rearrested by 1Y, Low-risk were less likely to be rearrested on a lead Felony (23%) charge compared to Moderate-risk (25%) or High-risk (42%). Additional face validity evidence connecting risk score to offense seriousness upon rearrest.

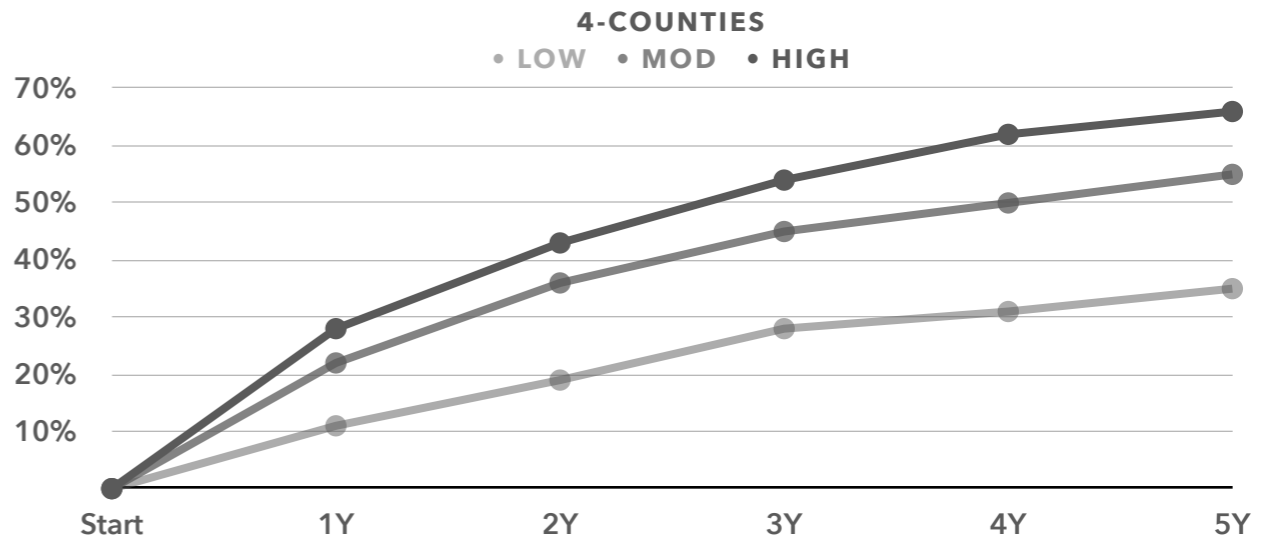
PREDICTIVE VALIDITY using logistic regression

- Moderate-risk individuals have 2.3 times the odds of recidivating by 1Y than low-risk individuals; high-risk individuals have 3.2 times the odds (both odds statistically significant at $p < .0001$). Similar, statistically significant odds ratios are found for 5Y recidivism.

RECIDIVISM BY CSST RISK LEVEL

Among Low, Moderate, High-Risk, and individuals not receiving the CST

Recidivism	4-Counties			
	Low	Mod	High	No CST
1Y	11%	22%	28%	19%
2Y	19%	36%	43%	27%
3Y	28%	45%	54%	33%
4Y	31%	50%	62%	38%
5Y	35%	55%	66%	41%
<i>n</i>	905	842	208	4,023



1Y RECIDIVISM: LEAD REARREST CHARGE

Misdemeanor (or Less) vs. Felony, among individuals rearrested



77% M
23% F



75% M
25% F



58% M
42% F

SUBGROUP RECIDIVISM

CST: BY DEMOGRAPHICS

KEY SUBGROUP FINDINGS among the CST-assessed

RECIDIVISM BY GENDER

- Compared to Low-risk males: Moderate-risk males were 2x likely to recidivate at 1Y; High-risk males nearly 3x.
- Compared to Low-risk females: Moderate-risk females were 1.7x likely to recidivate at 5Y; High-risk females nearly 2.5x.

RECIDIVISM BY RACE

- Compared to Low-risk white individuals: Moderate-risk were 2x likely to recidivate at 1Y; High-risk nearly 3x. At 5Y, High-risk white individuals were nearly 2x likelier to recidivate.
- Compared to Low-risk nonwhite individuals: Moderate-risk were nearly 2x likely to recidivate at 1Y; High-risk 2.2x. At 5Y, High-risk nonwhite individuals were 1.7x likelier to recidivate.

RECIDIVISM BY AGE

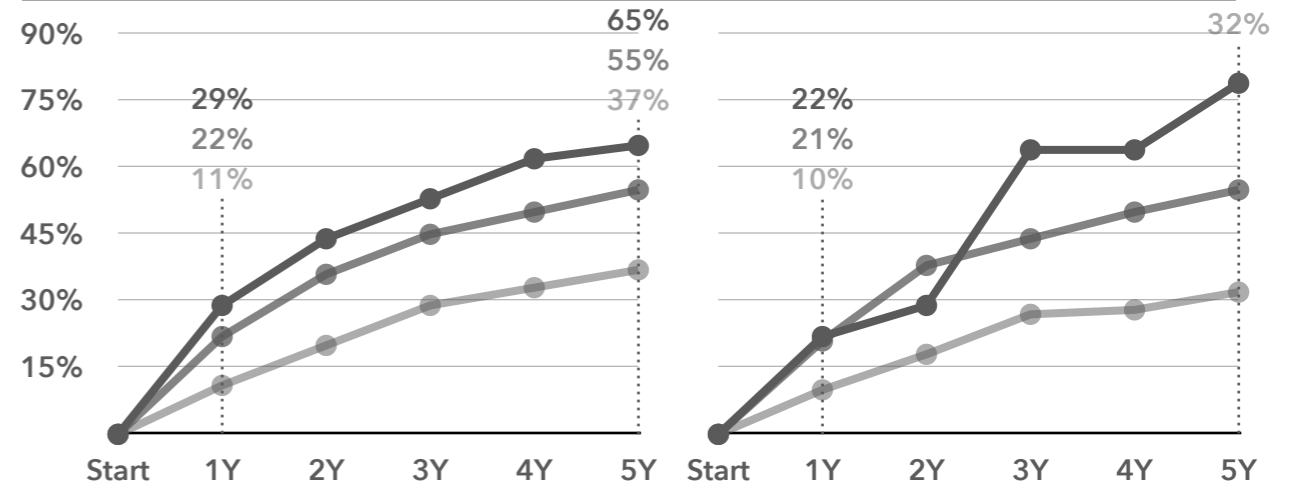
- Compared to Younger Low Risk individuals: Moderate-risk were 1.3x likely to recidivate at 1Y; High-risk 2x. At 5Y, Younger High-risk individuals were nearly 2x likelier to recidivate, and had the highest recidivism rates of any subgroup (87% over 5Y).
- Compared to Older Low Risk individuals: Moderate-risk were 2.3x likely to recidivate at 1Y; High-risk 2.7x. At 5Y, Older High-risk individuals were 1.7x likelier to recidivate.

4-COUNTIES

• LOW • MODERATE • HIGH

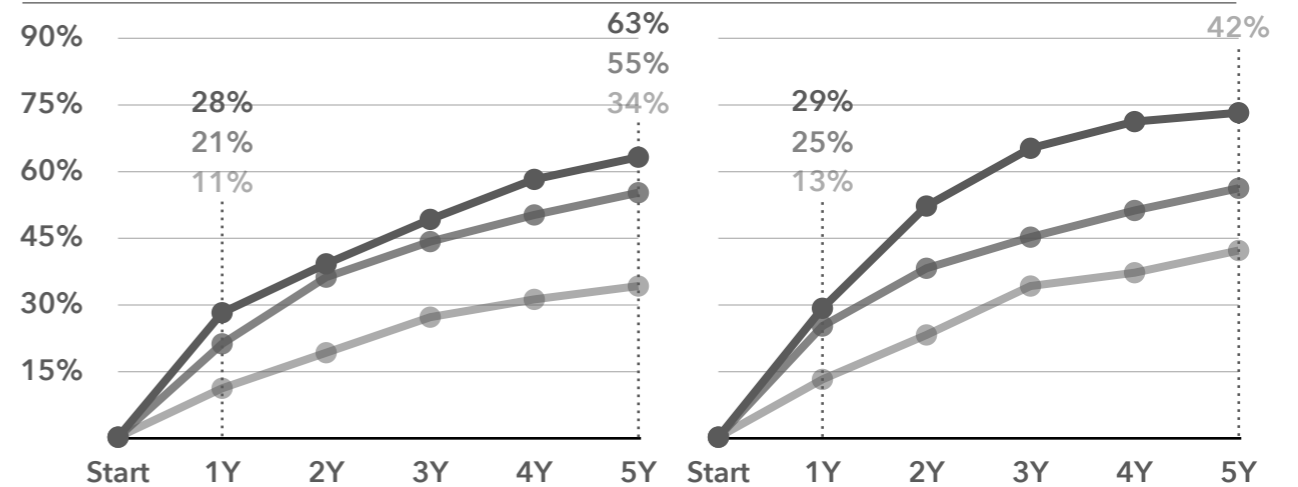
GENDER

Males vs. Females



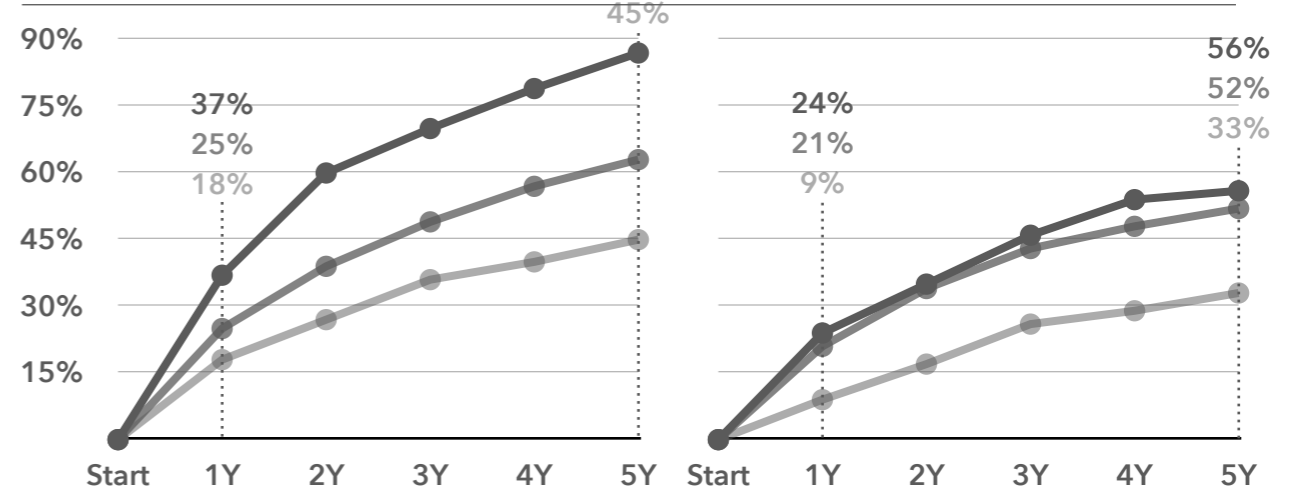
RACE

White vs. Nonwhite



AGE

Under 26 vs. 26 & Over



CHARGE ESCALATION

UPON REARREST AMONG CST-ASSESSED

Measure #1

VIOLENT CHARGE ESCALATION

Nonviolent-charged individuals whose first rearrest is for a Violent charge

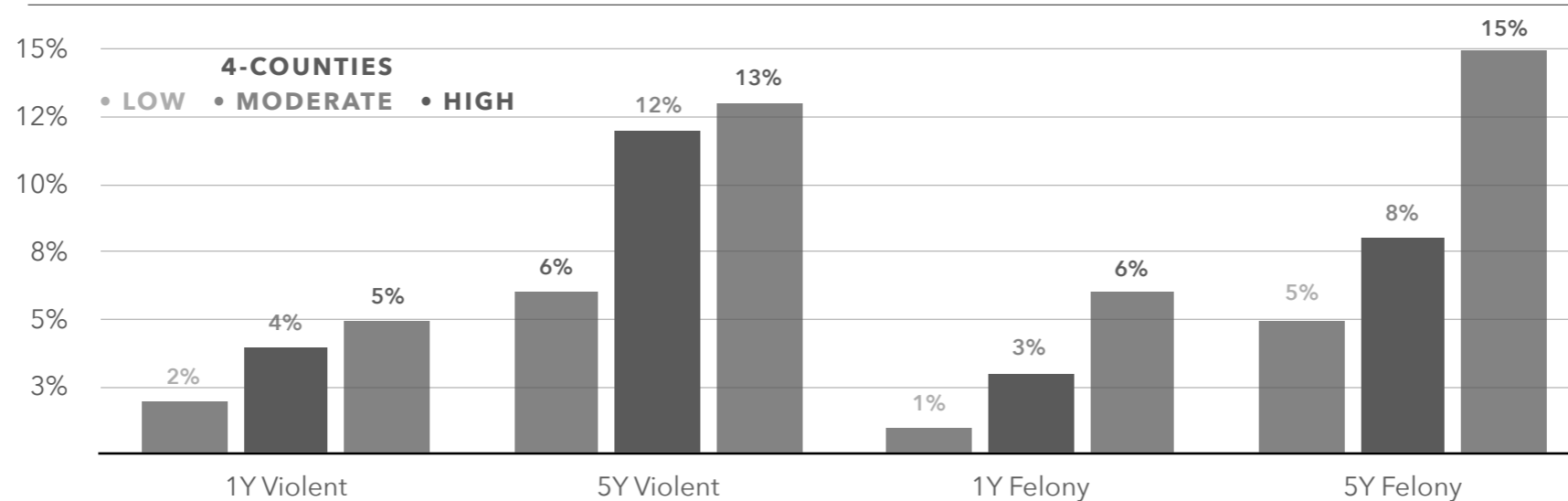
Measure #2

FELONY CHARGE ESCALATION

Misdemeanor-charged individuals whose first arrest is for a Felony charge

CST CHARGE ESCALATION RECIDIVISM

At 1 & 5 Years, for nonviolent-charged individuals and misdemeanor (or less)-charged individuals to assess escalation



STUDY TAKEAWAYS

AND QUESTIONS

STUDY TAKEAWAYS

FROM A FOUR-COUNTY ANALYSIS OF CSST & CST RISK ASSESSMENT SCORES & RECIDIVISM

KEY POINTS and takeaways to help guide Adult Probation's decision-making

CSST & CST RECIDIVISM OUTCOMES

- The CSST consistently identified low-risk individuals across demographic groups (gender, age, and race) and lead charge type. Low-risk individuals have less than half the 1Y recidivism rate than Moderate/High-risk individuals have (7% vs. 18%) and those not assessed (19%) with the CSST. These large gaps persist through 5Y recidivism rates (23% vs. 41%)
- Similarly, the CST clearly identifies higher-risk individuals that go on to recidivate at much higher rates (28% in 1Y; 66% in 5Y) than other individuals.
- The CST also illustrates clear links between risk level and recidivism charge escalation, with High-risk individuals escalating from Misdemeanors to Felonies at higher rates than others (both at 1Y and 5Y). High-risk individuals have 3x the 5Y recidivism charge escalation rate than those Low-risk (15% vs. 5%).

STRONG PREDICTIVE VALIDITY

- We find strong empirical evidence that the ORAS CSST and CST are predictive of recidivism risk across the four counties.
- Statistical validation tests (e.g. odds ratios) on the CSST and CST separately suggest strong, statistically significant, predictive ability that is in line with previous studies of the ORAS (concurrent validity) and recidivism outcomes are clearly differentiated between lower risk and higher risk groups, such that as risk score increases, so too does the recidivism failure.

INDIVIDUALS NOT ASSESSED FOR RISK

- Individuals CSST-assessed as Low-risk have 3x lower the odds of 1Y recidivism compared to those who were never assessed.
- Probation offices should consider using the CSST to assess all individuals newly entering onto caseload, especially since the tool can be quickly-administered, is predictive of recidivism risk, and informs risk/needs, interventions, supervision dosage, etc.

NEXT RESEARCH STEPS

**EXAMINING WHETHER EBPs IN PA COUNTY SUPERVISION
ARE CAUSING RECIDIVISM REDUCTION**

QUESTIONS AND DISCUSSION

THANK YOU FOR YOUR ATTENTION AND INTEREST

ROB ORTH, Ph.D.

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