

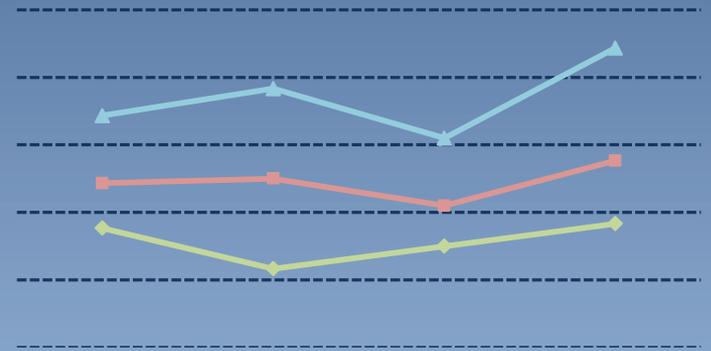
# Calculating and Utilizing Recidivism Rates

Texas Juvenile Probation Commission  
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# Outline

- I. Definition of terms used in a recidivism analysis
- II. How recidivism is used
- III. How TJPC calculates recidivism
- IV. Recidivism nationwide
- V. Conducting your own analysis

# Definitions in a Recidivism Analysis

- \* *Cohort* – a selected group sharing one or more characteristics in a set time frame.
  - Ex. Juveniles starting Probation Supervision in FY 2007.
- \* *Recidivism event* – the outcome or behavior being monitored (arrest/referral, incarceration).
  - Tracked over a period of time.

# Definitions in a Recidivism Analysis

- \* *Recidivism rate* – the proportion of offenders in a cohort with a recidivism event.
  - Converted to a percent
  - How many repeat criminal behavior

# How Recidivism is Used

# How Recidivism is Used

- \* Recidivism is a type of performance measure – how well is criminal justice intervention working to keep offenders from committing subsequent criminal behavior.
- \* The “intervention” can also include programs as a measure of program effectiveness.

# How Recidivism is Used

- \* If Program A has a 75% recidivism rate and Program B has a 45% recidivism rate, Program B appears to do a better job in preventing subsequent criminal behavior.
- \* What if Program A serves serious, chronic offenders and Program B is a first offender program?

# How Recidivism is Used

- \* Each year TJPC provides statewide 3 year recidivism rates to the Legislative Budget Board (LBB) for an annual report that also includes TYC and adult recidivism rates.
- Report is available at the link shown below: go to *Statewide Criminal Justice Recidivism and Revocation Rates* under Reports.  
[www.lbb.state.tx.us/PubSafety\\_CrimJustice/PubSafety\\_CrimJustice.htm](http://www.lbb.state.tx.us/PubSafety_CrimJustice/PubSafety_CrimJustice.htm)

# How Recidivism is Used

- \* LBB recidivism report

- Adult

- 1) Percentage of offenders **released from state jail** who were **re-incarcerated** within **three years** of release.
- 2) Percentage of offenders **released from prison** who were **re-incarcerated** within **three years** of release.
- 3) Percentage of offenders **released from prison** who were **re-arrested** within **three years** of release.

# How Recidivism is Used

- \* LBB recidivism report

- TYC

- 1) Percentage of juveniles **released from TYC** who were **re-incarcerated** within **three years** of release.
- 2) Percentage of juveniles **released from TYC** who were **re-arrested** within **three years** of release.

# How Recidivism is Used

- \* LBB recidivism report
  - Juvenile Probation

## Starting Deferred Prosecution

- 1) Re-arrested
- 2) Secure Placement
- 3) Incarcerated

## Starting Probation Supervision

- 1) Re-arrested
- 2) Secure Placement
- 3) Incarcerated

## Exiting Secure Placement

- 1) Re-arrested
- 2) Secure Placement
- 3) Incarcerated

3 years

# How Recidivism is Used

- \* This year in addition to the LBB report, TJPC provided all departments a list of 1 and 3 year recidivism rates by department for juveniles starting deferred and probation supervision (grouped into one category).
- \* Re-referral rates (Misd B/higher) and incarceration rates (TYC or TDCJ) were included.

# TJPC Recidivism Analysis

# Methodology

- \* A file of all juveniles in the probation system between 9/1/05 and 8/31/10 was sent to DPS for a match based on name, DOB, and if available SID number and/or SSN.
- \* A juvenile could be listed more than once to account for various possible name matches.
- \* This resulted in a total of 362,380 records sent.

# Methodology

- \* In TJPC data, unique identifier is HQ County Number + PID Number.
- \* Any tracking of a juvenile's future behavior is limited to that HQ County Number/PID Number combination.
- \* *Benefit of using DPS data is that it allows for a juvenile to be tracked across counties and into adulthood.*

# Methodology

- \* Three files were received back from DPS:
  - 1) Identification – name and demographic info
  - 2) Charges – arrest dates, offense info
  - 3) Court – arrest/disposition dates, sentence
- \* The files were merged with all TJPC referrals of those received and cleaned to remove exact duplicate records.
- \* This resulted in one file consisting of 1,152,419 arrests/referrals.

# Methodology

- \* Supervision cohorts were selected for FY 2007 and FY 2009 and matched to the DPS file.
- \* Only those with a match to the DPS file were selected for the final cohorts.
- \* *The two exceptions:*
  - 1) Juveniles on supervision for a Class C offense or
  - 2) Juveniles who were referred to the department by someone OTHER than law enforcement.

# Methodology

- \* For 3 year cohort →
  - 78.8% first match
  - 86.8% final match (including the exceptions)
  
- \* For 1 year cohort →
  - 72.7% first match
  - 82.7% final match (including the exceptions)

# Defining A Cohort

- \* 1 year cohort: Juveniles with a deferred or probation supervision begin date occurring during FY 2009 (9/1/08 – 8/31/09).
  - 34,978 juveniles: 47% probation, 53% deferred
- \* 3 year cohort: Juveniles with a deferred or probation supervision begin date occurring during FY 2007 (9/1/06 – 8/31/07).
  - 40,898 juveniles: 50% probation, 50% deferred

# Defining A Recidivism Event

## To calculate re-arrest

- \* DPS and TJPC data

## To calculate TYC/incarceration

- \* TYC → TJPC data (TYC dispositions)
- \* Adult incarceration → TDCJ data

# Defining A Recidivism Event

- \* Re-referral for 1 year cohort: Juveniles with a DPS arrest or TJPC referral for a Misd B or higher offense within 1 year of Supervision Begin Date.
  - \* Re-referral for 3 year cohort: Juveniles with a DPS arrest or TJPC referral for a Misd B or higher offense within 3 years of Supervision Begin Date.
- \*\*Violations of Probation are NOT included.*
- \*\*Adult arrests are included.*
- \*\*Juveniles with more than one re-referral are only counted once.*

# Defining A Recidivism Event

- \* TYC/Incarceration for 1 year cohort: Juveniles with a TYC disposition or a date received in TDCJ within 1 year of Supervision Begin Date.
- \* TYC/Incarceration for 3 year cohort: Juveniles with a TYC disposition or a date received in TDCJ within 3 years of Supervision Begin Date.

# Calculating Recidivism

## 1 year recidivism analysis:

Supervision Begin Date

9/1/08 – 8/31/09

Tracked for recidivism event prior to

9/1/09 – 8/31/10



## 3 year recidivism analysis:

Supervision Begin Date

9/1/06 – 8/31/07

Tracked for recidivism event prior to

9/1/09 – 8/31/10



# Calculating Recidivism

\* Recidivism Rate =

$$\left( \frac{\text{\# of juveniles who recidivated}}{\text{\# of juveniles in the cohort}} \right) \times 100$$

# Calculating Recidivism

\* *Example:*

Out of 200 juveniles who started supervision in FY 2009, 75 were re-referred for a Misd B offense or higher within one year of their supervision begin date.

$$\frac{75}{200}$$

# Calculating Recidivism

\* *Example:*

Out of 200 juveniles who started supervision in FY 2009, 75 were re-referred for a Misd B offense or higher within one year of their supervision begin date.

$$\frac{75}{200} = 0.375 \times 100 = \underline{37.5\% \text{ recidivism rate}}$$

# Important to Note

- \* All juveniles in your cohort **MUST** have **complete** data for the **entire** study period.
- \* For instance, if you do not have DPS/adult data, juveniles older than 16 must be excluded for a one year analysis.
  - *Including cases with incomplete data may skew your rate to appear lower.*

# Results

- \* Statewide rates of re-referral for Misd B or higher
  - 1 year rate: 31.7%
  - 3 year rate: 58.5%
  
- \* Statewide rates of TYC/Incarceration
  - 1 year rate: 1.6%
  - 3 year rate: 8.0%

# Results

- \* Statewide rates of re-referral for juveniles starting deferred supervision
  - 1 year rate: 26.8%
  - 3 year rate: 51.1%
- \* Statewide rates of re-referral for juveniles starting probation supervision
  - 1 year rate: 37.3%
  - 3 year rate: 66.0%

# Results

- \* 1 year re-referral rate for juveniles starting supervision = 31.7%
- One or zero referrals prior to supervision: 28.2%
- Two or more referrals prior to supervision: 47.1%
- Entered a program after starting supervision: 27.8%
- Did not enter a program after starting supervision: 34.9%

# Results

- \* 1 year re-referral rate for juveniles with **two or more referrals** prior to supervision = 47.1%
- Entered a program after starting supervision: 40.2%
- Did not enter a program after starting supervision: 52.9%

# Recidivism Nationwide

The slide features a dark blue background with a white wavy graphic at the bottom. The text 'Recidivism Nationwide' is centered in a white, sans-serif font.

# Recidivism Nationwide

- \* There is no national recidivism rate for juveniles due to the fact that juvenile justice systems vary so much across states.
- \* This highlights a problem with comparing recidivism rates when so much relies on the definitions used in calculating the rate.
  - Importance of absolute clarity when reporting results.

# Recidivism Nationwide

- \* OJJDP's *Juvenile Offenders and Victims: 2006 National Report*
- \* Virginia Department of Juvenile Justice contacted other states to collect information on juvenile recidivism studies across the country.
  - 27 states provided verified data, all with different cohort types and recidivism events

# Recidivism Nationwide

- \* Though all involved studies of juveniles released from state custody, several jurisdictions also focus on juvenile probationers and calculate rates of reoffending while under supervision.
- \* On average, 15% of juvenile probationers were re-adjudicated for offenses committed while they were under supervision.
  - In Texas, the one year re-adjudication rate for juveniles starting probation in FY 2009 was 13%.

# Recidivism Nationwide

- \* Due to variety in juvenile justice systems across states and the different ways that people calculate recidivism, there is no “benchmark” recidivism rate for juveniles nationwide.

# Conducting Your Own Analysis

The bottom of the slide features a decorative graphic consisting of several overlapping, wavy lines in various shades of blue and white, creating a sense of movement and depth.

# Conducting Your Own Analysis

- \* Important questions to ask when conducting a recidivism analysis:
  - ✓ What are the cohort characteristics?
    - Ex. Starting supervision, leaving secure placement/TYC
  - ✓ What is considered a recidivism event?
    - Ex. Re-arrest, adjudication, incarceration
  - ✓ What is the time frame?
    - Ex. 6 months, 1 year, 3 year

# Conducting Your Own Analysis

- \* What a recidivism analysis involves:

Referrals + Cohort = Recidivism rate (% w/a new referral)

↑                      ↑

File 1                File 2

- \* Unfortunately, CASEWORKER does not allow Sneak-A-Peeks that pull from multiple tables at the same time. However...

# Conducting Your Own Analysis

- \* Using SAPs and Excel you can perform the necessary functions to get a recidivism rate.
- \* Once you have two SAPs – cohort and referrals – saved as Excel (csv) files you can use the “VLOOKUP” function to match the files and find your rate.

# Conducting Your Own Analysis

- \* SAP 1 → PID numbers and their Referral Dates for all formal referrals.
- \* SAP 2 → PID numbers and their Supervision Begin Dates.
- \* To find a recidivism event (referral) within a year of beginning their Supervision, match the two files on PID number.

# Conducting Your Own Analysis

- \* To match two files using the VLOOKUP, you need both files to be OPEN that you are trying to match.
- \* Manually type the formula OR go to:  
Formulas – Lookup & Reference – VLOOKUP

# Conducting Your Own Analysis

\* Four components of VLOOKUP formula:

=VLOOKUP(1,2,3,4)

- 1) Top first cell of Column A (A1). This must be the variable you are matching.
- 2) Directory location, file name and entire data area of File 2.
- 3) The number of the column in File 2 which you are adding to File 1 (ex. B=2).
- 4) FALSE (this will produce a '#N/A' for non-matching PIDs).

# Conducting Your Own Analysis

## \* Result

=VLOOKUP(A1, 'C:\Documents\[File 2.xlsx]Sheet1'!\$A\$1:\$B\$100,2,FALSE)

Component

1

2

3

4

# Conducting Your Own Analysis

## \* IMPORTANT!

- You are LIMITED to referrals within your own department. This means that the recidivism rate you find will still be lower than what TJPC reports due to the use of DPS data in the TJPC analysis.

# Conducting Your Own Analysis

## \* IMPORTANT!

- For a one year analysis ONLY include juveniles 16 and younger.
- For a three year analysis ONLY include juveniles 14 and younger.

# Conducting Your Own Analysis

\* COMING SOON –

A TJPC webinar with a detailed, step-by-step demonstration of finding a recidivism rate using VLOOKUP in Excel.

# QUESTIONS?

## Thank you!

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