New Findings from the Smart Policing Initiative (SPI)

Cambridge, MA; New Haven, CT; and Rochester, NY SPI

Thursday, November 17
2:00 to 3:20pm
Hilton, Grand Salon 3, 1st Level
Evaluating focused deterrence: A randomized control trial in three jurisdictions

Operation RASOR
November 2016

Annual Meeting of the American Society of Criminology

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With the assistance of:
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Overview

• Focused Deterrence defined
• Previous Research
• RASOR in Massachusetts
• The Intervention
• Methods
• Findings
Focused Deterrence

• AKA “lever pulling”
• Deter future violent behavior of chronic offenders by communicating directly with them
• Tell offenders about the impact on the community and new efforts in response
• Use ‘all available legal sanctions (levers)’ when violence occurred
Results of Previous Programs

- Boston successful: violent offenses slowed; youth homicides declined but program ended after five years
- Indianapolis, Stockton (CA), High Point (NC) showed success too
- Other agencies did not fare as well: Baltimore and San Francisco had implementation problems
- Braga and Weisburd’s systematic review found that 10 of 11 studies showed some crime reduction
Results of Previous Programs

• Indianapolis: only study that looked at recidivism and individual behavior of probationers (2002-2005)

• Two treatments: law enforcement and community leader meetings

• Found no differences between treatment and control groups that received either a law enforcement meeting or community leader meeting

• Recidivism was the same across treatment and control groups – arrested for similar offenses, failed urine tests, technical violations
Results of Previous Programs

• Why did Indianapolis probationers fail?
  – Treatments were not intense
  – Post-meeting follow up was ‘seriously limited’
  – No evidence of levers being pulled after the meeting
  – Call-in meetings were the primary mechanism used to alter the behavior of probationers
RASOR: Focused Deterrence

- Three jurisdictions: Cambridge, Everett, and Somerville
- Intervene with persons who engage in social harm
- Law enforcement = police, district attorney, probation
- Community/service = mental health, treatment, job possibilities, homeless, clergy, community organizations
Primary goals of Operation RASOR

1. Prevent future victimization and social harm of the offenders
2. Reduce recidivism of those who create social harm
3. Determine whether the modified focused deterrence approach is a successful strategy.
Focused Deterrence

• **Operation RASOR**
  – Cross-Jurisdictional
  – 3 District Courts
  – Data-driven
  – Social Harm
  – Limited Leverage
  – Complete Partnership with Services Providers
  – Police Assist with Service Delivery and Case Management

• **Pulling Levers**
  – Single Jurisdiction
  – 1 District Court
  – Officer Identified
  – Violent Crimes
  – Complete Leverage
  – Separate Messages from Providers and Law Enforcement
  – Police Typically Focus on Traditional Enforcement Efforts Only
Five phases of intervention

1. Identification
2. Outreach
3. Notification Meeting
4. Resource Delivery
5. Relentless follow up
Identification Phase

- Regional database combined RMS for CPD, SPD, EPD
- Over 300,000 unique individuals
- Over 5,000 are a defendant/suspect and cross jurisdictional
- Algorithm used to determine social harm score
  - Offense weight, role of individual, gang involvement, use of firearm, drugs, and the time lapse between the incident and the present
Social Harm

Percentage of Individuals with Percentage of Weight

Cumulative Percentage of Individuals
Outreach Phase

- Crime analysts, police officers, and detectives developed detailed case profiles
- Each candidate was assigned a police case manager who notifies candidate of status as an impact player
- Candidates invited to the notification meeting
- Case manager attempted to engage the family or friends of candidate
Notification Meeting Phase

• Candidates informed of the harm they are causing to communities

• Services available to assist in changing behavior
  – Substance abuse programs, employment opportunities, housing options, and other available services

• Continued criminal behavior will resort in a combined effort to hold candidate accountable
  – Arrests, prosecutions, and enhanced sanctions
  – Risk of punishment is higher because they are being watched
Notification Meetings

- Treatment candidates self-selected into two groups:
  - Participants – those who chose to participate
    * Completed intake assessment & develop treatment/ action plans
    * Met regularly with their case management team
  - Non-participants – those who chose not to participate (or are removed)
    * Received more intensive enforcement efforts through a plan developed for each offender by case management team
Resource Delivery Phase

- Participants met with the social service provider coordinator for an assessment.
- Developed goals and an action plan.
- Social service coordinator and police case manager provided follow up with participant.
- Relentless follow-up by case managers.
THE EXPERIMENT
Methodology

• A randomized controlled trial (RCT)
• Randomized block design and stratified allocation for top 150 offenders on list
• Top 1-50 in database randomly assigned to Treatment & Control groups
  – Allows for equal numbers of treatment and control groups for each notification meeting
Methodology

• Three Cohorts and three call-in meetings:
  – April 2014
  – August 2014
  – November 2014

• Interventions by case managers from April 2014 to June 2015

• Measured recidivism in the treatment and control groups

• Used ‘survival’ analysis for the outcome evaluation
Implementation Measures

• Was the treatment and control implemented as planned?
• Observations of call-ins
• Interviews with officers, community/service providers to determine how they followed protocols
• Contacts with offenders – keep records or logs
Findings

• No statistically significant differences in time to arraignment between treatment and control subjects for the full sample.

• For cohort 1: treatment group had a longer time to arraignment compared to control subjects, but this difference was not statistically significant.

• For cohort 2, the control subjects had a longer time to arraignment compared to RASOR subjects and this difference was statistically significant.

• For cohort 3, the control subjects had a longer time to arraignment compared to RASOR subjects, but this difference was not statistically significant.
Kaplan Meier Survival Estimate

All Groups

Cohort 1

Control  Treatment

Cohort 2

Control  Treatment

Cohort 3

Control  Treatment
Findings

• Considerable differences in the amount of time spent per case between the cohorts. This may explain why the results from cohort 1 were more consistent with the hypothesized relationships.
  – Cohort 1 received on average 706.8 officer-minutes of case management time
  – Cohort 2 received on average 58.4 officer-minutes of case management time
  – Cohort 3 received on average 37.6 officer-minutes of case management time
Conclusion

• Future studies:
  – Examine the relationship between dosage (case management time) and impact
  – This study suggests that the effectiveness of focused deterrence may be related to the amount of time spent by officers in case management activities.
New Haven CT Smart Policing Initiative

Chris Sedelmaier, PhD - University of New Haven
Sgt. Roy Davis - New Haven Police Department

November 16, 2016

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Project Background

• September 2011: The New Haven Police Department (NHPD) and University of New Haven (UNH) in partnership receive a USDOJ SPI grant.

• **Goal:** Sustain and support evidence-based policing at all department levels and seek to use research findings to inform police leadership and improve decision making throughout the department.
Initial Challenges

- One month after the grant award, NHPD Chief resigns. New chief calls for return to foot patrol and community policing.
- NHPD also severely understaffed.

- “How do we instill lasting change in organizational culture, when the organization is constantly changing?”
- “How do we do more with fewer officers?”
Four-Legged Plan

1. Foot patrol officers would use problem-oriented policing techniques to engage the public and involve them in identifying neighborhood problems.

2. Application of SARA model
   - Officers identify problems
   - Crime Analysis Unit (CAU) supplies “flash sheets” – neighborhood-level analysis products that the officers could take with them into the field.

3. Treatment area selection by risk terrain modeling to identify areas most at risk for future violent crime.

4. Leadership stability in the form of a district manager and sergeant team assigned for the duration of the project.
The New Haven Project

• February 2013: New class of 19 sergeants received two-week training in problem-oriented policing techniques, the SARA model, and basic leadership issues.

• May-June 2013: CAU identifies high-risk violent crime areas in Newhallville neighborhood using location quotient, risk terrain modeling.

• July 2013: Walking beats begin in Newhallville neighborhood with specific directive to use SARA techniques to address violent crime, reach out to local community.
Site Selection

- Newhallville – highest location quotient of crime in New Haven.
- NHPD Crime Analysis Unit created risk terrain models to identify risky areas in a manner more complete than relying on any single variable.
- The same criteria used to create the Newhallville risk areas were used to generate risk areas in other parts of New Haven.
- Comparison neighborhoods chosen based on location quotient calculation for violent crime. The selected neighborhoods scored higher than the rest of the city.
  - Fair Haven
  - Hill
  - West River
  - Edgewood
Data Collection – Violent Crime

- CAU produced weekly reports on Newhallville neighborhood.
  - Major crimes (of which violent crimes are a subset)
  - Calls for service: police-initiated calls vs. public-initiated calls
  - Comparison between risk terrain modeling identified risk-areas, other areas
  - Major crimes and calls for service by TOD/DOW

- Measuring Change
  - 13 weeks prior, 13 weeks intervention, and 13 weeks post.
  - Comparisons: 2012, comparison neighborhoods.
  - Seeking impacts on violent crimes, calls for service.
What Happened? (Neighborhood Level)

• Violent crime decreases in Newhallville
  – 19 percent reduction from pre-intervention through intervention period
  – 40 percent further reduction in the 13-week post-intervention period
  – Driven by sharp reduction in shootings
  – Significant difference from Edgewood neighborhood
## What Happened? (Neighborhood Level)

<table>
<thead>
<tr>
<th>Location</th>
<th>Pre-Intervention</th>
<th>Intervention</th>
<th>Post-Intervention</th>
<th>Pre-Post Change (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Newhallville</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Grand Total</td>
<td>73</td>
<td>82</td>
<td>49</td>
<td>-32.9%</td>
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<tr>
<td>Violence Total</td>
<td>42</td>
<td>34</td>
<td>20</td>
<td>-52.4%</td>
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<tr>
<td><strong>Hill</strong></td>
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</tr>
<tr>
<td>Grand Total</td>
<td>140</td>
<td>110</td>
<td>87</td>
<td>-37.9%</td>
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<tr>
<td>Violence Total</td>
<td>38</td>
<td>50</td>
<td>35</td>
<td>-7.9%</td>
</tr>
<tr>
<td><strong>Fair Haven</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>102</td>
<td>94</td>
<td>82</td>
<td>-19.6%</td>
</tr>
<tr>
<td>Violence Total</td>
<td>41</td>
<td>34</td>
<td>34</td>
<td>-17.1%</td>
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<tr>
<td><strong>West River</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>53</td>
<td>34</td>
<td>44</td>
<td>-17.0%</td>
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<tr>
<td>Violence Total</td>
<td>14</td>
<td>6</td>
<td>15</td>
<td>7.1%</td>
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<tr>
<td><strong>Edgewood</strong></td>
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</tr>
<tr>
<td>Grand Total</td>
<td>59</td>
<td>45</td>
<td>42</td>
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<tr>
<td>Violence Total</td>
<td>10</td>
<td>10</td>
<td>19</td>
<td>90.0%</td>
</tr>
</tbody>
</table>
What Happened? (Risk Terrain Modeling Area Level)

• Every violent offense decreases in Newhallville risk terrain modeling areas, period-over-period
  – 36 percent reduction from pre-intervention through intervention period
  – 56 percent further reduction in the 13-week post-intervention period
  – Small raw numbers, but important reductions
  – Areas accounted for 60 percent of all violent crime in Newhallville before intervention; 47 percent during intervention

• Significant difference from comparison neighborhoods, but a caveat.
  – Seems due to robbery increase in Fair Haven.
## What Happened? (Risk Terrain Modeling Area Level)

<table>
<thead>
<tr>
<th></th>
<th>Pre-Intervention</th>
<th>Intervention</th>
<th>Post-Intervention</th>
<th>Pre-Post Change (Percent)</th>
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<tbody>
<tr>
<td><strong>Newhallville</strong></td>
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<tr>
<td>Grand Total</td>
<td>38</td>
<td>32</td>
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<tr>
<td>Violence Total</td>
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<td>16</td>
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<tr>
<td><strong>Hill</strong></td>
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<tr>
<td>Grand Total</td>
<td>64</td>
<td>53</td>
<td>45</td>
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<tr>
<td>Violence Total</td>
<td>25</td>
<td>26</td>
<td>14</td>
<td>-44.0%</td>
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<tr>
<td><strong>Fair Haven</strong></td>
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</tr>
<tr>
<td>Grand Total</td>
<td>20</td>
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<td>24</td>
<td>20.0%</td>
</tr>
<tr>
<td>Violence Total</td>
<td>7</td>
<td>6</td>
<td>11</td>
<td>57.1%</td>
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<tr>
<td><strong>West River</strong></td>
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<tr>
<td>Grand Total</td>
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<td>5</td>
<td>400.0%</td>
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<tr>
<td><strong>Edgewood</strong></td>
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<tr>
<td>Grand Total</td>
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<tr>
<td>Violence Total</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Unforeseen Challenge: Labor Issues vs Treatment Integrity

• Union Contract and Treatment Integrity
  – This issue has impacted all others
  – Could not use static roster of officers for Newhallville walking beats – assignment goes to officer with lowest overtime hours.

• Traditional Problem-Oriented Policing needs stable assignment
  – Individual or small team of officers remains dedicated to “their” problem for the duration of the issue.
  – How to implement with rotational assignment?
Comparing Models

Traditional Problem-Oriented Policing

- Individual officer:
  - Scans
  - Analyzes
  - Responds
  - Assesses

New Haven SPI – “Adaptive Problem-Oriented Policing”

- Patrol officer
  - Scans
- DM/SGT/CAU
  - Analyzes
  - Develops response for Patrol to implement
  - Assesses
Treatment Strength Concern

Shifts Walked by Number of Officers

<table>
<thead>
<tr>
<th>Shifts Walked</th>
<th>Officers</th>
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</thead>
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<tr>
<td>1</td>
<td>40</td>
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<td>2</td>
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<td>10</td>
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</tr>
<tr>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

Cumulative Percent

- 0% - 40%
- 40% - 60%
- 60% - 80%
- 80% - 100%
“Frequent” vs, “Non-Frequent” Officers

- Activity log data
- No practical difference in citizen contacts, response activities
  - Frequent Officer shifts identified more emerging problems
  - May indicate comfort level between officers, community members
- Big Lesson: Problem-Oriented Policing can work, even with rotational assignment!
More Information

• The New Haven Spotlight Report was released this summer, and is available at:
Smart Policing Initiative
Rochester, New York, 2016

Preventing Dispute Related Violence

Michael Ciminelli, Chief
Joseph Morabito, Commander
Nick Petitti, Dir. of Business Intelligence
Rochester Police Department

John Klofas, Ph.D.
Irshad Altheimer, Ph.D.
Center for Public Safety Initiatives
Rochester Institute of Technology
The Skeleton: 3 + 1
Dispute Intervention Components

1. Identify Disputes
2. Assess the risk of violence in the disputes
3. Intervene for the purpose of preventing violence
4. Ongoing Assess of the process and outcomes of dispute cases.
Research and the Development of Event Focused Violence Reduction Strategies

Analysis has supported an increasingly sharp focus for Law Enforcement activity.
Background Research: Related Studies Done for the Project

- Violence Incident Reviews
- Extensive ride-alongs
- Analysis of Rochester Shooting Database
- Officer Focus Groups
- Pathways to Peace Focus Group
- Analysis of Monroe Crime Analysis Center Dispute Bulletins
- Dispute Incident Reviews with Police, Prosecutors, Probation
- Tracking program process
Research Findings

- A lot of police work involves low level disputes which do not result in violence.
- But a lot of violence (60% of shootings) does involve disputes.
- So differentiating between low risk and high risk disputes is important.
- Disputes are multiple events that can be recognized after the fact.
- Disputes can also be recognized while in process because they involve a series of connected incidents.
- Police work is not usually organized around the concept of dispute. Most of the times cases are treated as individual events. But analysis shows that many are linked.
- Organizing around disputes can lead to a range of interventions to prevent further incidents when the risk of further dispute related violence is identified.
An Operational Definition of Dispute

Retaliatory Dispute Definition

• A violent retaliatory dispute is an interaction involving conflict, over a period of time, between two or more individuals and/or people associated with them and marked by two or more events involving confrontation or intimidation, in which at least some of those events involve violent acts or credible threats of violence.
Why have we not focused on Disputes?

• Police operations focus on individual cases. Combinations of cases may not be identified.
• Criminal Records data focus on individual crimes. Researchers cannot easily look across cases to identify connections
• Group interventions focus on group affiliation. Often groups are identified then violence associated with the group is identified.
• Until the growth of crime analysis it was difficult to focus on a sequence or cluster of cases. Now better tools exist.
5 Steps in Dispute Focused Violence Prevention

1. Identification & Level 1 Risk Assessment
2. Level 2 Risk Assessment
3. Review of Active Disputes
4. Development and Implementation of Interventions for High Risk Disputes
5. Ongoing Assessment
Step 1: Identifying Disputes

- Patrol Officers know disputes.
- Community members know disputes.
- Crime Analysts identify disputes from reading crime and incident reports.
- There are behavioral indicators of disputes:
  - Reckless endangerment (house shot up)
  - People stopped in neighborhoods carrying weapons
  - Repeated fights
  - Conflict between known violent offenders
Step 2: Dispute Risk Assessment
(These were identified through analysis of identified disputes, incident reviews and focus groups with police officers)

1. Current event violence
2. Linked past events
3. Involvement of weapons in this dispute
4. Participants’ prior violence
5. Participants’ reputation
6. Participants gang, drug, gun, recent incarceration history
7. Recruited or family problem connections
8. Associates’ gang, gun, drug history
9. Physical proximity of parties
10. Other aggravating or mitigating factors
Step 3: Weekly Review

- Strong Command Staff Engagement
- Review of Level 2 and Additional Information
- Direct Participation of Criminal Justice Partners
  - District Attorney
  - State Police and County Sheriff
  - Probation and Parole
  - Non-Law Enforcement
- Identification of “Account Executive”
- Identification of Interventions
- Information/Data Collection
Questions to Consider

• Is there anything specific to be done in terms of investigation?

• Can participants be arrested now or taken into custody for anything, including probation or parole violations?

• Can other action be taken which can lead to an arrest (including, for example, motor vehicle license or other violations, traffic offenses, warrants, etc.)?

• Should the dispute participants be directly questioned or confronted (ex. Knock and talk)?

• Are there others who should be brought into the effort to prevent violence in the dispute (family, community leaders, street outreach, SROs etc.)?

• Is there other direct action that can be taken (ex. assist in relocation, help manage debts, change school)?
Step 4: Development and Implementation of Interventions

- Primary goal is prevention of further violence
- Arrest may or may not contribute to that goal
- Interventions tailored to individual dispute fact are best
- Broad range of interventions should be encouraged
Investigative Interventions

- Focused on investigating dispute incidents to lead to arrest

Diagram:
- Prioritize Inv.
- Refer to Special Inv.
- Work with Major Crimes
- Monitor Jail Calls
- Jail Debrief
- Social Media
- Mental Health Issues
- Canvass Area
- Refer to School Officers
Crossover Interventions

- Enforcement action focused beyond the current dispute incidents

- Targeted Enforcement
- Saturation Patrol
- Probation & Parole Searches
- Consent Searches
- Warrant/DMV Checks
- GPS Support
- Property Code Enforcement
- Social Service Checks
- Knock & Talks
- Dispute Letter
- Mental Health Arrest
- Intelligence Gathering
Direct Prevention Interventions

• Direct preventive action other than arrest related
Step 5: Ongoing Assessment

• At each meeting, review recent past cases to document interventions and their effectiveness.

• When violence has occurred in reviewed disputes conduct comprehensive incident reviews
  – What happened,
  – How the intervention went
  – What other steps could have been taken
  – What lesson can be learned

• Continually collect and analyze data on the dispute
Key Factors Supporting Dispute Intervention Focus

Violence as Predictor
Specific Focus
Addresses Factors
Leadership & Resources
Partners
Compatibility

Violence Prevention NOW
Unanticipated Issues

• Importance of the ongoing planning process
• Evolution of the planning process to include new program elements
• Program disruption associated with external factors (Promotion of program leaders, departmental reorganization)
• Problem of changes in key personnel (Dispute analyst was changed 4 times in 8 months)
• Limited deviation from intervention strategies involving investigation and arrest
• Limited ability to track data and assess effects and outcomes
Smart Policing Initiative
Rochester, New York, 2016

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Questions?