

Police Early Intervention Systems: The State of the Art

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Early Promise of EI Systems

- Small set of problem officers accounts for disproportionate fraction of complaints, uses of force, other risk-related outputs
 - For the purpose of managing risk, the promise of early intervention turns on identifying problem officers – a prediction of whose behavior would be problematic without intervention
 - Problem officers are those prone to abuse police authority

Core Structural Features

- Performance metrics as indicators of problem behavior
 - E.g., citizen complaints; use of force
- Identification/selection criteria – numerical thresholds & review practices
 - E.g., 3 citizen complaints in 12 months
- Intervention(s) to address performance issues
 - Retraining; supervisory counseling; EAP
- Post-intervention monitoring

Extant Knowledge

- Several outcome evaluations report positive impacts
 - Pre-/post-intervention changes in performance indicators
 - Fairly weak evaluation designs
 - No plausible control group
- One evaluation reports no positive impacts and some detrimental impacts
 - Stronger design with matched control group
- Limited evidence about processes

Open Questions

- Positive and/or negative impact
 - Individual behavior/performance
 - Organizational dynamics/morale
- Implications of structural variation in EI systems for
 - Operation
 - Effectiveness
- Minimizing false positives, false negatives
 - Ambiguity of indicators
- Utility of EI systems for supporting officer health and wellness

The State of the Art Project

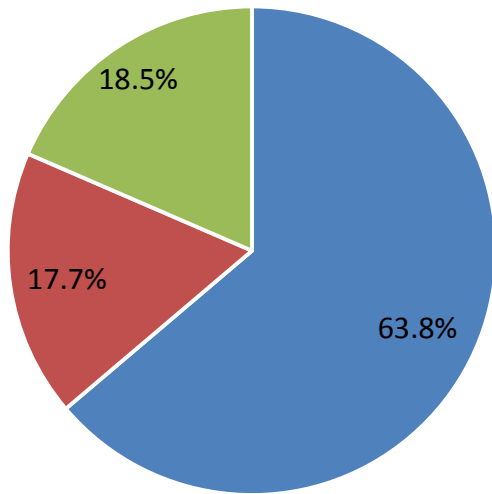
- Supported by the National Institute of Justice
- Phase I: Agency survey
 - Population: 344 agencies that reported having an EIS in 2007 LEMAS survey
 - Presumably “mature” systems that had reached an equilibrium in operation
 - 274 (80%) agencies responded
 - 243 reported having an EIS in 2014
 - Information on indicators, selection criteria, interventions, post-intervention monitoring

The State of the Art Project (cont.)

- Phase II: Case studies
 - Six agencies, selected to obtain variation in key structural respects
 - 5 agencies with 1,000-2,500 sworn; 1 agency with 200-500 sworn
 - Process and/or outcome evaluation
 - Qualitative analysis of
 - Interviews with agency executives and EIS operators
 - Interviews with field personnel
 - Quantitative analysis of
 - EIS indicators
 - EIS “flags” and reviews
 - Enforcement activity

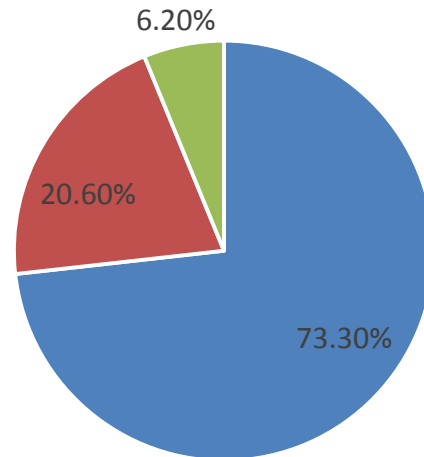
"Mature" Systems (N=243)

Agency Size (N=243)



■ > 500 ■ 500-999 ■ 1000+

Agency Type (N=243)



■ Municipal ■ Sheriff ■ State

Identification: Type of Indicators

Indicator	N	%
Citizen complaints	221	90.9
Non-lethal force	216	88.9
Internal complaints	205	84.4
Vehicle damage/accidents	201	82.7
Internal investigations	185	76.1
Officer-involved shootings	166	68.3
Vehicle pursuits	166	68.3
Internal policy violations	160	65.8
Officer-involved firearm discharges	158	65.0
Internal reprimands	141	58.0
Failure to appear in court	83	34.2
Sick days used	71	29.2

Indicator	N	%
Officer injury	71	29.2
Citizen injury	69	28.4
Tardiness	66	27.2
Loss of equipment	59	24.3
Civil suits	53	21.8
Failure to complete training	52	21.4
Unsatisfactory performance evaluation	39	16.0
Sick leave linked w days off	37	15.2
Sick leave linked w vacation	35	14.4
Discretionary (secondary) arrests	31	12.8
Failure to take annual physical	18	7.4

Identification: Time and Numbers

- Most systems rely on time and numbers

Example					
	Time Frames				
Thresholds – Citizen complaints	1 month	3 months	6 months	12 months	Totals (agencies)
1		1		1	2
2	1	8	11	18	38
3	2	8	14	51	75
4		2	3	12	17
5	1			8	9
6			1	1	2
12				1	1
Other	77				77
Column Totals (agencies)	4	19	29	92	221

- Uncommon to consider longer than 12 months
- 6-12 month time frame most common
- Tolerance for same indicator varies

Pre-Intervention Practices

	#	%
Performance review conducted	156	64.2
Review conducted by:		
Immediate supervisor	65	41.7
Training personnel	1	0.6
Command staff	28	17.9
IA/professional standards	32	20.5
Other/multiple	30	19.2
Total	156	100

Intervention Types

Intervention	N	%	Intervention	N	%
Immediate supervisor counseling	217	89.3	Counseling: other command staff	184	75.5
Professional counseling (e.g., EAP)	204	84.0	Training: cultural diversity	179	73.7
Training: departmental policy	203	83.5	Training: weapons care	175	72.0
Training: defensive tactics	194	79.8	Training: communication skills	174	71.6
Training: driving	194	79.8	Training: human relations	166	68.3
Training: verbal (force) de-escalation	190	78.2	Training: stress awareness	165	67.9
Training: ethics	185	76.7	Reassignment/transfer	152	62.6
			Peer officer support	95	39.1
			Crisis intervention teams	94	38.7
			Training: other	48	19.8

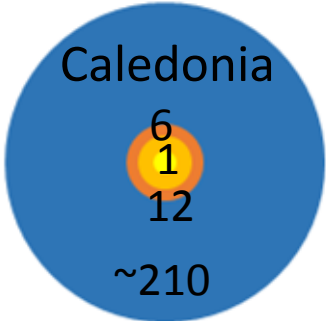
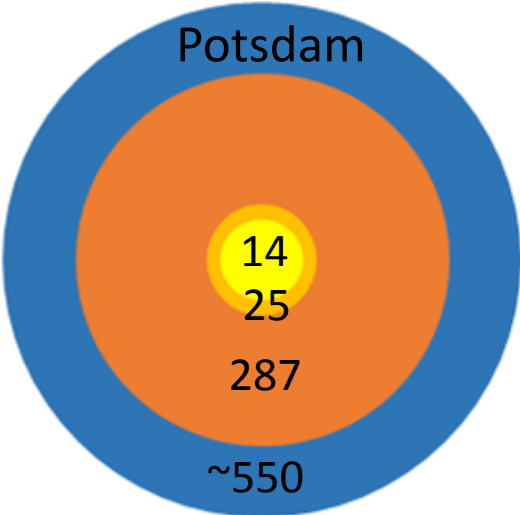
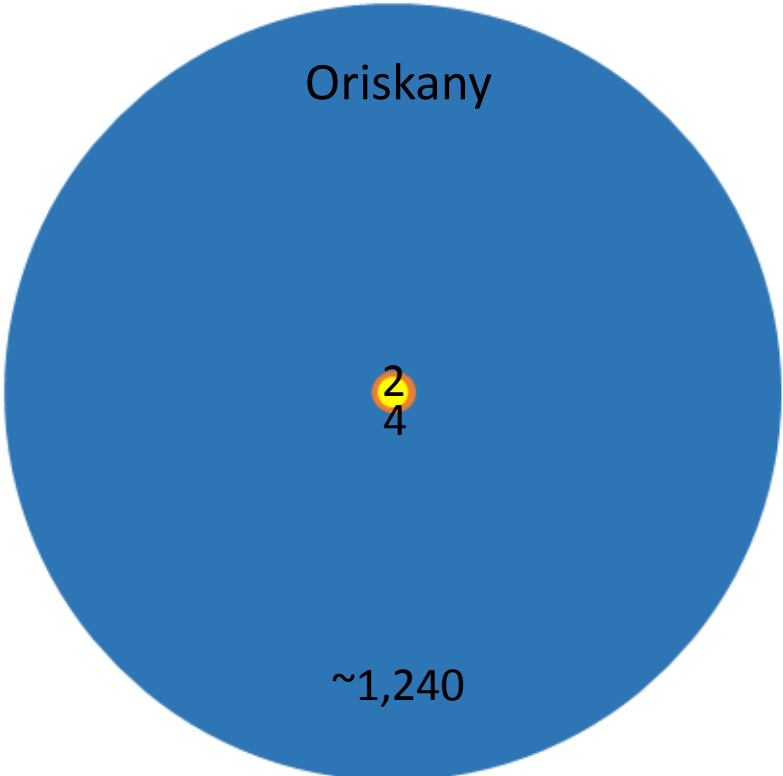
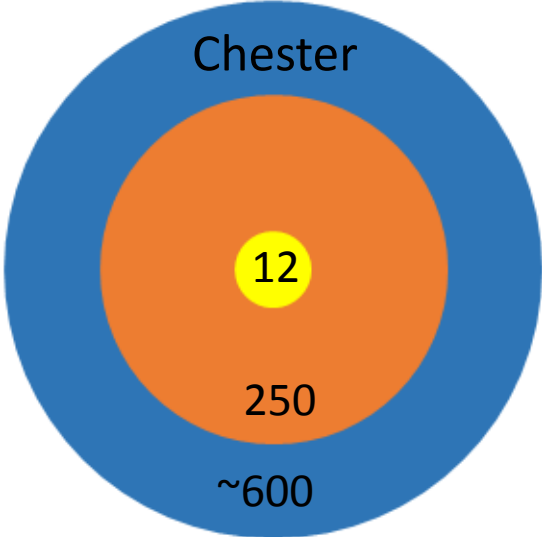
Post-Intervention Monitoring

	#	%
Post-intervention monitoring	161	66.3
Duration of monitoring:	157	
1 month	3	1.9
2 months	2	1.3
3 months	14	8.9
4 months	1	0.6
6 months	28	17.8
12 months	42	26.8
24 months	3	1.9
Varies	35	22.3
Continuously	16	10.2
Other/multiple	15	9.6

Case Study Agencies' EIS Structures

	Brewster	Oriskany	Chester	Potsdam	Sidney	Caledonia
Time & numbers – high thresholds		X				X
Time & numbers – moderate thresholds					X	
Time & numbers – low thresholds	X					
Peer comparison threshold			X			
Hybrid thresholds				X		
Selection review by EIS coordinator/IA	X			X	X	X
Selection review by supervisor		X		X	X	X
Selection review by mid-level manager			X			
Selection review by committee					X	
Post-intervention monitoring subject to higher review	X		X			

Average Annual EIS Alerts by Agency



EIS Impacts - Oriskany

2001-2012	Intervention (N=19)		Control (N=19)	
	Pre	Post	Pre	Post
Complaints*	1.6	0.7	1.1	0.5
Use of force*	1.3	0.6	1.5	0.6
ECD use*	0.8	0.2	1.3	0.3
Arrests**	32.9	26.8	40.6	23.8
Stops**	147.4	125.7	171.2	111.9
*Data from January 1999, through June, 2015				
**Data from January 2004, through June, 2015				

EIS Impacts - Potsdam

	Intervention (N=11)		Controls (N=11)	
2014	Pre	Post	Pre	Post
Complaints*	2.01	0.83	1.64	1.3
Citizen initiated*	1.75	0.72	1.48	1.23
Use of force*	4.57	3.42	4.4	4.1
Pointing of firearm*	2.06	1.13	1.71	1.74
Arrests*	85.1	58.68	80.17	59.48
Citations*	27.81	16.79	29.92	10.32
*Data from January, 2012 through December, 2016				

EIS Impacts - Chester

	Intervention (N=19)		Control (N=47)		Supervisory review (N=28)	
	Pre	Post	Pre	Post	Pre	Post
2012-2013						
Internal investigations*	0.62	0.38	0.51	0.23	0.65	0.53
Use of force*	1.10	0.91	1.14	0.80	1.73	1.62
Vehicle pursuits*	0.21	0.19	0.17	0.15	0.23	0.29
Citizen complaints*	0.95	0.51	0.55	0.53	0.93	1.17
Civil suits*	0.02	0.11	0.03	0.02	0.02	0.04
Firearm discharges*	0.01	0.08	0.01	0.04	0.02	0.03
Stops**	123.56	130.71	80.38	113.37	120.74	172.12
*Data from January, 2006 through December, 2015						
**Data from January, 2009 through December, 2015						

Outcome Analyses: Limitations

- Estimated impacts are averages
 - Could be contingent on nature of the officer's issues or of the intervention
- Outcome measures limited to those captured in police records
 - Impacts on other forms of behavior not detectable
- Three agencies
 - One yet to be analyzed
- Multi-variate analysis yet to be done
- Statistical power limited by small Ns
 - Small effects lost in the variance

Views from the field: Consensual

- Inadequate indicators
 - Potentially useful but not quantifiable
 - Potentially useful but not considered
 - Point of comparison
- Importance of front line supervisors
 - Identifying problems
 - Monitoring change
 - Framing the intent and building trust
- Symbolism
 - Favorable view
 - Cynical view
- Failure to institutionalize
 - No training
 - Training limited to functionality of the system
 - Reinforcement training needed
 - General awareness

Mixed views from the field: False positives

- the drawbacks
 - Identifying active officers not true problems
 - Lowers morale
 - Reduces proactivity
- Yes, but...
 - Not false positives, they are opportunities
 - Oversight and accountability
 - Good supervisors can frame the intent of EIS in positive light
 - Open the door for conversation

Mixed views from the field:

Demands on supervisors

- The drawbacks
 - Takes supervisors off the streets
 - Forces supervisors to talk to officers who aren't really problems – loss of trust/legitimacy
 - Redundancy
- Yes, but...
 - Provides supervisors a tool to review subordinates and reduce the odds of "slipping through cracks"
 - Get to know new officers assigned to the unit
 - Reviewing behavior and talking to officers is squarely within the job description
 - Reinforces administration's expectation for engaged supervisors

Mixed views from the field: Operationalization

- Responding to alerts
 - Immediate supervisor
 - vs
 - More removed party
- Review committee
 - Demonstrates executive buy-in
 - Macro-level view of patterns
 - Monitor fairness in interventions
 - Vs
 - Highest levels of command should not be reviewing names of officers ultimately deemed not to have a problem
- Periodicity of EIS alerts
 - Rolling
 - Vs
 - Quarterly

Making sense of the views from the field

- Executive emphasis on goal of EIS
- Impetus for introducing the EIS
- How long EIS has been operational
- Culture of supervision
- Balance struck
- Other departmental policies and practices
- Efforts to institutionalize

Conclusions

- EI systems vary structurally and operationally
 - No previous evidence about the implications of the structural and operational features
- Structural choices are complicated
 - Any feature may have both organizational virtues and vices
 - Should explicitly consider them
 - Include affected parties in the discussion

Conclusions (cont.)

- EIS indicators have severe limits as identification tools
 - None is a valid measure of misconduct
 - Smoke v. exhaust
 - Many officers who reach numerical thresholds are upon further review not in need of intervention
 - Potentially useful indicators are not included
- On average, even officers selected for intervention do not appear to be egregiously problematic
 - Intervention has no detectable impacts on behaviors that we can measure in 3 agencies

Conclusions (cont.)

- EI systems are themselves parts of larger systems of management and supervision
 - How and how well EI systems work turns partly on
 - Those larger systems
 - Their integration into routine organizational practices
 - How and how well EI systems support or impede those larger systems may turn partly on structure

Conclusions (cont.)

- Human element of EI systems warrants as much attention as the software
 - Operation turns on how an EIS is managed, from the top of the agency to the bottom and from the beginning of the process to its conclusion
 - See EI systems as a tool for supervision and management
 - Supervisors and managers are not tools for EIS

Future of EI Systems

- Appears to be room for improvement in:
 - The predictive utility of numerical indicators
 - Make use of performance histories
 - Make adjustments for exposure
 - Peer comparisons or ratios
 - The preparation of supervisors and managers for their role in EI systems
 - Reviewing performance, diagnosing problems, delivering interventions
- Keep expectations for EI systems realistic
 - Not a panacea for abuse of police authority
 - May not be adaptable to other problems

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