(4)	т	7		Г
	U	T.	7	

Evidence based policing – what can we learn from the British experience?

Dr Aiden Sidebottom

Jill Dando Institute of Security and Crime Science
University College London
a.sidebottom@ucl.ac.uk

UCL

Outline for today

- The story of medicine: anecdote, authority, evidence
- From evidence-based medicine to evidence-based policing
- Developments in Britain: EMMIE and the What Works Centre for Crime Reduction
- Requirements for and challenges in evidence-based policing

Study name	Outcome	Statistics	for each s	tudy	\$5	d diff in	means	and 95%	CI
		Std diff in means	Standard	p-Value					
KC Gun Phila. Drug Comers	Gun crimes Combined	0.866 0.855	0.275 0.258	0.002	1	1	1	#	= $ $
Buenos Aires Police JC Disp. Prost. JC Disp. Drug	Motor vehicle theft incidents Prostitution events Drug events	0.617 0.525 0.441	0.169 0.149 0.131	0.000 0.000 0.001				=	
	Total calls	0.369	0.132	0.005	1		-	•	- 1
Boston SST Dakland Beath Health	Total violent incidents	0.341	0.020	0.000	1		١.	•	- 1
IC DMAP	Combined	0.147	0.270	0.585	1	11	_ 2		- 1
owell POP	Total calls	0.145	0.034	0.000	1	11	- 1	-	- 1
IC POP	Combined	0.143	0.043	0.001	1		15	8.5	- 1
Phila. Foot Patrol	Violent incidents	0.143	0.021	0.000	1		15		- 1
Pittsburgh Bar Raids	Drug calls	0.125	0.038	0.001	1				- 1
NYCTNT 67	Combined	0.087	0.077	0.257	1			97	- 1
Minn. Patrol	Total calls	0.061	0.015	0.000	1				- 1
KCCrack .	Total calls	0.051	0.039	0.188	1			_	- 1
Minn. RECAP Comm.	Total calls	0.015	0.137	0.913	1		-		- 1
lacksonville POP	Combined	-0.005	0.092	0.959	1		-		- 1
NYC TNT 70	Combined	-0.027	0.080	0.739	1				- 1
Jacksonville Patrol	Combined	-0.055	0.096	0.568	1		-		- 1
		0.184	0.035	0.000					- 1

Bloodletting



UCL

UCL

First, do no harm

- The long road from *eminence-based medicine* to *evidence-based medicine*
- "Evidence based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients...integrating individual clinical expertise with the best available external clinical evidence from systematic research".

Sackett et al. (1996)

≜UCL

Evidence-based policing



Evidence-Based Policing

Abstract
The real parallege of "visions better findings" label
memorial methors are followed by the control of the control o

"Police practices should be based on scientific evidence about **what works** best"

Lawrence Sherman, 1998

UCL

Do we need evidence-based policing?

Cambridge-Somerville Youth study Richard Clarke Cabot Physician 1838-1939 AUCL Joan McCord Social Scientist 1930-2004



			≜UCL
_	_		

Chasing ghosts?

	Two-week task	One-year task
All Areas	20% (38)	59% (152)
Area 1	12% (8)	64% (54)
Area 2	15% (9)	52% (41)
Area 3	33% (21)	61% (57)

McLaughlin, L. M., Johnson, S. D., Bowers, K. J., Birks, D. J., & Pease, K. (2007).Police perceptions of the long- and short-term spatial distribution of residential burglary. *International Journal of Police Science & Management*, 9(2), 99-111.

Ratcliffe, J. H., & McCullagh, M. J. (2001). Chasing ghosts? Police perception of high crime areas. *British Journal of Criminology*, 41(2), 330-341.

UCL

The seductive idea of EBP

- · Evidence-based policy as a "social movement"
- Many major developments in the name of evidence-based policing
- Few people disagree with the notion of evidencebased policing
- What constitutes the evidence in evidence-based policing?

≜UCL

Randomistas versus Realists

- Randomised controlled trials (RCTs) as the "gold standard" evaluation evidence
- RCTs provide high quality evidence on the effects of an intervention (did it work?)
- The rigour of an evaluation is not associated with the generalisability of the finding
- Critical question: Will *it* work for me? Does evidence travel?



4		ı
	U)	H

What do decision makers need from evaluation evidence?

"Improve the way government and other organisations create, share and use high quality evidence for decision-making" "Generating and collating the evidence is of no use if it never reaches the commissioners and professionals who need it" David Halpern, 2014



4	Т		7
	υ,	V.	7

EMMIE: What decision makers need to know

E = Effect (did it work?)

M = Mechanisms (how did it work?)

M = Moderators (in what conditions does *it* work best?)

I = Implementation (the challenges putting *it* in place?)

E = Economy (is *it* cost effective?)

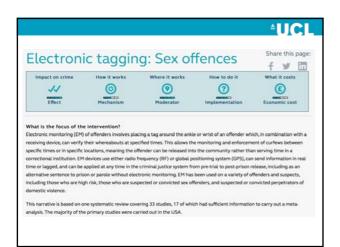
Johnson, S. D., Tilley, N. and Bowers, K. J. (2015). Introducing EMMIE: An evidence rating scale to encourage mixed-method crime prevention synthesis reviews. *Journal of Experimental Criminology*:

UCL

Does the available evidence speak to EMMIE?

- Identify, rate and rank the evidence reported in systematic reviews in crime reduction (n = 337)
- Evidence on Effect dominated but other elements of EMMIE were underreported
- Most systematic reviews say nothing about economics





Requirements for and challenges in evidence-based policing

UCL

Requirements for evidence-based policing Research evidence needs to exist

- · Research evidence needs to be trustworthy
- · Research evidence needs to be relevant
- · Research evidence needs to be accessible
- There needs to be an appetite to locate and use research evidence (demand not just supply)
- · There needs to be an openness to identify failure

т	

What influences UK police decision making?

- 8 out of 10 survey respondents use
 - Experience/professional judgement
 - Colleagues
- 5 out of 10 use
 - Conferences
 - College of Policing products
- 3 out of 10 consult academic research
- 1 in 10 use research databases
- Senior officers more likely to engage with research and be part of practitionerresearcher collaborations

Hunter, G., May, T. and Hough, M. (2017). An Evaluation of the 'What Works Centre for Crime Reduction
Final Repor

inal Report

UCL

Barriers to police use of research

- Survey respondents say they lack the time to locate research to inform decisions (54%)
- Under half think academics produce research that is relevant to everyday policing (42%)
- Many felt research findings are unclearly presented and full of jargon (48%)
- Research evidence doesn't give clear enough answers to be usable in practice (34%)

Hunter, G., May, T. and Hough, M. (2017). An Evaluation of the 'What Works Centre for Crime Reduction' Final Report

1101	ı
<u> </u>	
A way ahead	
-	
±UCL	
Looking forward – 'Tipping Point' (Sherman, 2015)	
Be realistic, reform in any organisation is slow and tricky	
Support of senior/chief officers seems to be crucial	
Effective partnerships between police and universities can help - (critical friends) - EMMIE as a common language	
Broaden the scope of EBP beyond crime prevention (think drones, body worn cameras, TASERs)	
Create a "safe space" for experimentation; view failure as an opportunity to learn and improve	
Training and promotion prospects	
±UCL	
Conclusions	
It is too soon to know the impact of evidence-based policing	
Few disagree with the notion that police decisions (broadly defined) might usefully be informed by research evidence	
Much has been done to promote and facilitate evidence-informed ways of working	
Debate remains on the kinds of evidence needed to achieve the sought-after outcomes of evidence-based policing	
EMMIE sets out what decision makers need to know from research evidence; little research evidence provides such answers	

		п
_		ш
		١.

References

Eck, J. E. (2017), "Some Solutions to the Evidence-Based Crime Prevention Problem". In J. Knutsson and L. Tompson (eds.), Advances in Evidence Based Policing. London: Routledge.

Johnson, S.D., Tilley, N. and Bowers, K.J. (2015). Introducing EMMIE: an evidence rating scale to encourage mixed-method crime prevention synthesis reviews. *Journal of Experimental Criminology*, 11 (3), pp 459-473.

Sherman, L.W. (2013). The rise of evidence-based policing: targeting, testing, and tracking. *Crime & Justice* 42(1), 377–451.

Sherman, L. W. (2015). A tipping point for "totally evidenced policing" ten ideas for building an evidence-based police agency. *International criminal justice review*, 25(1), 11-29.

Sidebottom, A., Tompson, L., Thornton, A., Bullock, K., Tilley, N., Bowers, K., & Johnson, S. D. (2017). Gating alleys to reduce crime: A meta-analysis and realist synthesis. *Justice Quarterly*, 1-32.

Sidebottom, A., Thornton, A., Tompson, L., Belur, J., Tilley, N., & Bowers, K. (2017). A systematic review of tagging as a method to reduce theft in retail environments. *Crime Science*, 6(1), 7.

Tompson, L., Belur, J., Thornton, A., Bowers, K., Johnson, S., Sidebottom, A., Tilley, N. and Laycock, G. (under review). Taking stock of systematic reviews in crime reduction: an evidence appraisal using the EMMIE framework.

What Works Centre Crime Reduction Toolkit http://whatworks.college.police.uk/toolkit/Pages/Toolkit.asox

•			