

Using Data within the Mayor's Office for Policing And Crime

An inside job - an introduction to MOPAC Evidence & Insight

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MAYOR OF LONDON
OFFICE FOR POLICING AND CRIME

Mayor's Office for Policing And Crime

Headed up by the Mayor of London
who is responsible for policing in
London



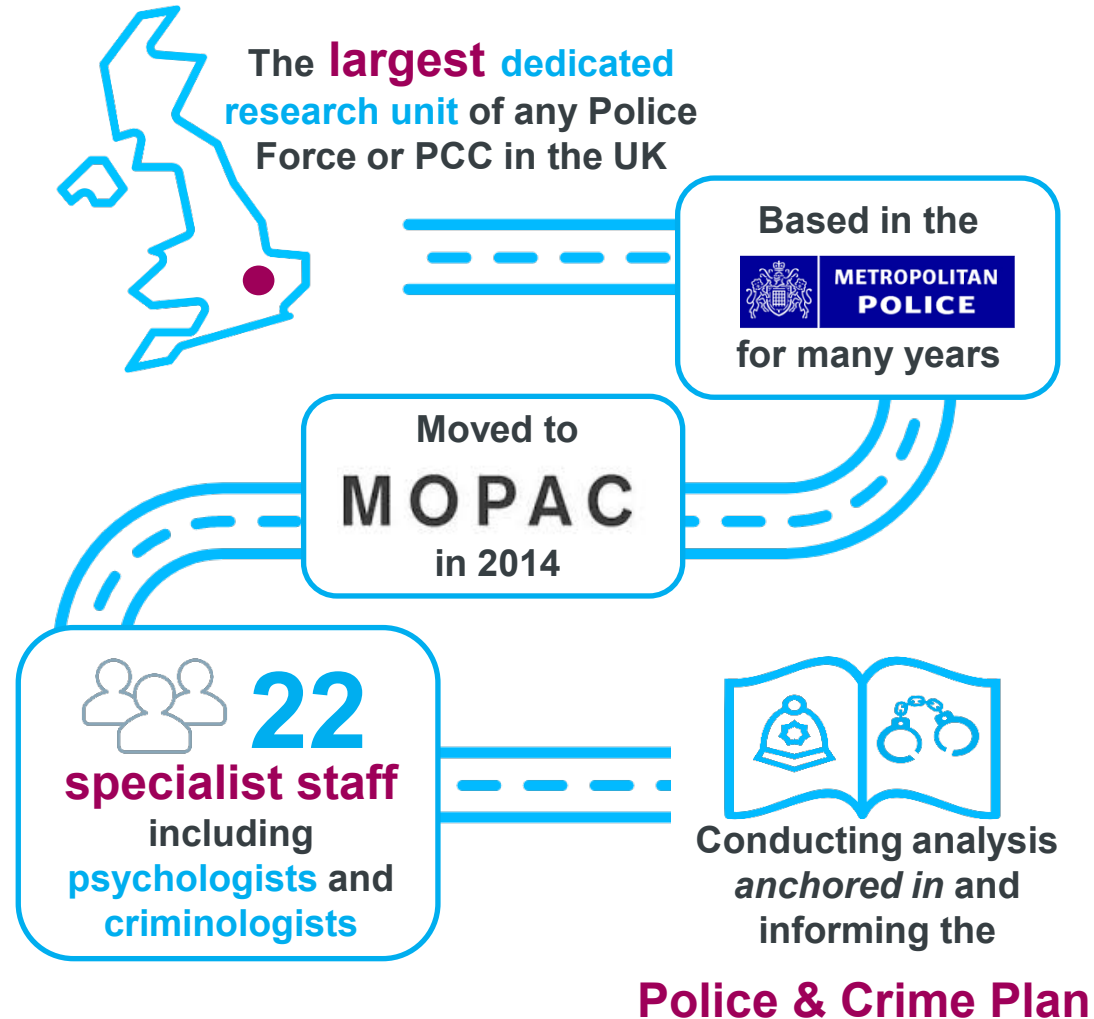
Led by Sophie Linden – Deputy Mayor
for Policing and Crime (DMPC)

MOPAC sets the direction and budget of the
Metropolitan Police on behalf of the Mayor

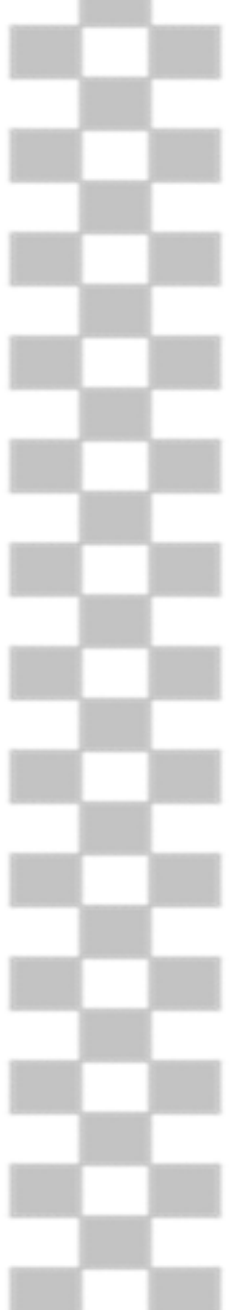
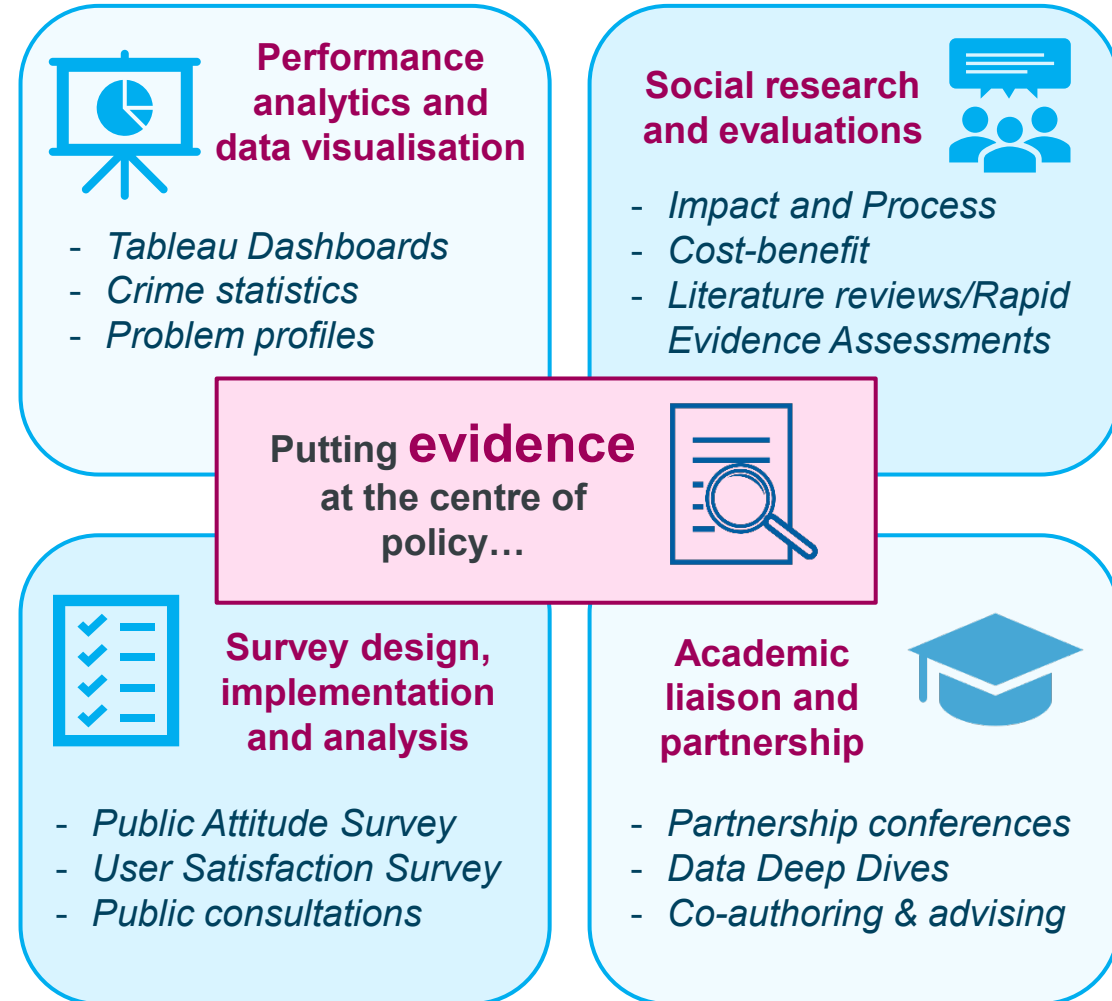


An introduction to MOPAC Evidence and Insight

Who are we?



What do we do?

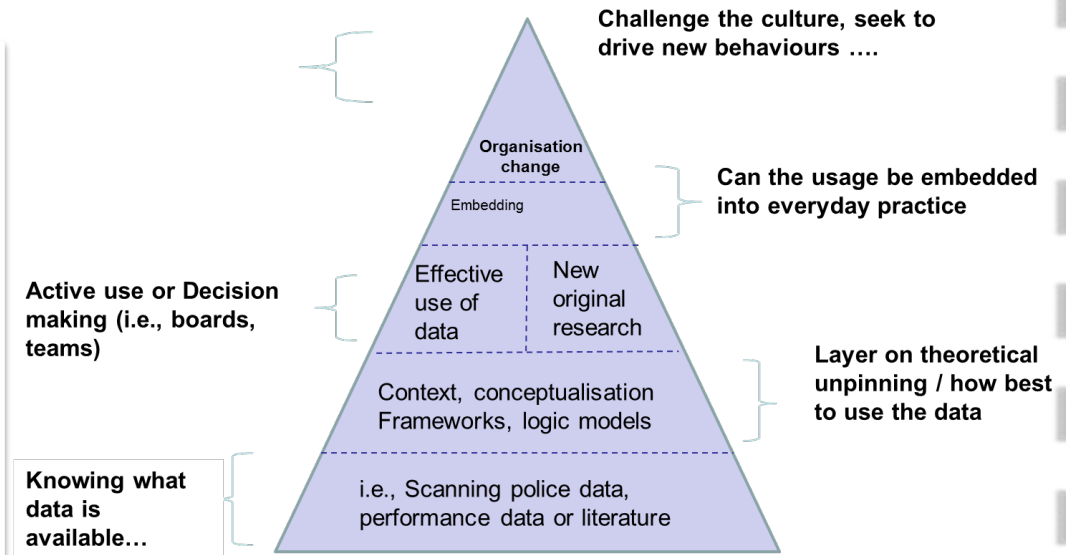


Opportunities in Police Data: *An obliquely hidden goldmine*

A data goldmine exists But who knows about it ?
Lack of clear descriptions and access routes.

- **Crime Recording Information System (CRIS)** – primary crime reporting system. Flags, Victim, witness, suspect, dates, location, venue...
- **Computer Aided Dispatch (CAD)** – Calls into the Police, attendance, demand...
- **MERLIN** – vulnerable adults and children, missing people...
- **Stops database** – Stop and Search, Stop and account, aggregate and individual levels...
- **NSPIS** – custody system, demand, custody suite information...
- **PNC** – All offending history, includes disposals...

Don't need to be interested in policing ...
....to want to use police data....



Confidence (Public Attitude Survey)
Satisfaction (User Satisfaction Survey)
Self generated data from our evaluations

Layer on theoretic conceptualisations to seek organisational drive

Top level of many of these are published. **Data Quality...** Totally dependant upon accurate completion. These are not promoted, very few people know, unless officers themselves... Do not work with the data as 'gospel'... Work with the caveats – an organisational record.

Social Research & Evaluation

- Both conducting evaluations as well as organisational embedding
- Lots of types and methodologies... no right answer as to which to use... but there are wrong ways.
- 'Evaluation' and 'performance ' are closely related. They go together very, very well...

MOPAC has a focus upon evaluation ... Both practically

Nearly 40 evaluations *complete or in current process* since 2015. Wide range – from small results analysis to more complex

I use a broad menu of *'process' 'performance', 'impact' and 'economic' evaluations ...*


...Decision making based on many factors – evidence base, design, implementation, throughout, ...

Thinking Professionals - A tool to Support Evidence Based Working

This interactive tool is for all those practitioners interested in evidence based thinking and research generation. It is split into two broad areas - the first seeks to take people through *the research journey*, step by step (from understanding what the problem is to contributing to the evidence base), presenting tips and learning at each step.

The *second* broad area complements this journey and presents a series of *frequently asked questions* with the specific aim to support research/evaluation *decision making*. These take individuals through a series of in-depth questions that ascertain in each instance, what research may or may not be possible given a variety of circumstances, all the way to tentative costs of different research approaches.

This tool does not expect you to be an expert in conducting research. It is aimed at a variety of staff, be this *policy makers, operational staff, analysts, researchers and commissioners of research*. Regardless of role, the main audience the guide has been developed for share one common interest - the need to be evidence based.

At any stage within this tool - press the home sign  = to return to this page.

Click here to go through THE RESEARCH JOURNEY

- I want to know how to explore THE BACKGROUND OF A PROBLEM**
- Help me explore WHY SOMETHING HAS HAPPENED**
- Help me explore IF SOMETHING WORKS OR NOT**
- Help me explore IF SOMETHING IS VALUE FOR**

If you have any questions please contact: evidenceandinsight@mopac.london.gov.uk

This tool was developed by MOPAC Evidence and Insight in order to better enable conversations around evaluations and analytics. For more information about the work of MOPAC Evidence & Insight please see: <https://www.london.gov.uk/what-we-do/mayors-office-policing-and-crime-mopac/data-and-research>

MOPAC MAYOR OF LONDON OFFICE FOR POLICING AND CRIME

- A **randomised control trial** of Body Worn Video: 450 cameras across MPS teams, main findings outlined a reduction in complaints and allegations (down by 33%); public opinion very positive to the innovation. Many challenges in the data (matching, systems etc...)

https://www.london.gov.uk/sites/default/files/bwv_report_nov_2015.pdf

Analytics into the London **'Gangs Matrix'** – examination of over 5000 gang individuals over the previous 5 years. Understanding impact of a retrospective, pan London, scheme with selection bias... Worked with UCL to develop new means of exploring success – pulling in offending, victimisation, Stop and search (before/during/after the scheme)

https://www.london.gov.uk/sites/default/files/gangs_matrix_review_-_final.pdf

A quasi-experimental evaluation into offender management.

An 11 million pound, two year initiative on the most prolific offenders. Comparison group developed and matched at a borough and ward level (matched on population, drug crime, acquisitive crime, deprivation, age of population, education, prison releases). **Results showed No impact.**

Implementation, implementation, implementation! Don't want good research on bad schemes.

https://www.london.gov.uk/sites/default/files/slp_reducing_reoffending_board_-_may_2011_-_info_item_-_diamond_year2_final_120411.pdf

https://www.london.gov.uk/sites/default/files/final_evaluation_tool.xlsm

... and in embedding into the organisation

MOPAC has strong role as a commissioner of services. In 2012/13 MOPAC commissioning budget was **£23.6m**; this has grown to a budget of **£53.6** in 19/20. Is this spend evidence based? What is it delivering?

For a minority we can know this through evaluation - but it is simply not possible to 'evaluate' everything robustly.

A conversation of where to prioritise evaluation resource.... and embed a wider evidence based / systematic approach throughout the wider commissioning journey.

15m pounds on VAWG funding. We developed problem profiles, evidence base questions for bidders to answer, bidders to complete logic models, set KPIs...

Provide wider training with policy and those who are receiving monies, critical friendship and support, development of tools...

Impact/
VFM

Most active evaluation will focus on **performance/ results analysis** and/or understanding of **process**.

All contracts/initiatives to have a minimum ask of basic data capture – in terms of documenting deliverables (inputs, activities, spend, outcomes, key dates...).

What initiatives should be prioritised for this most robust analytics?

Decision making criteria (cost, innovation, vulnerability).

Has to be implemented well to get here

Time and resources increase

Wider research - The London Rape Review

Aim: to develop a comprehensive picture of reported rape in London and develop insights...

Coding of all rape allegations made to the MPS in April 2016 (a sample size of 501).

146 variables coded across five broad areas:

- Victim Characteristics
- Perpetrator Characteristics
- Offence Circumstances
- Procedural Characteristics
- Case Outcome

89% victims female

41% victims presented with a mental health need

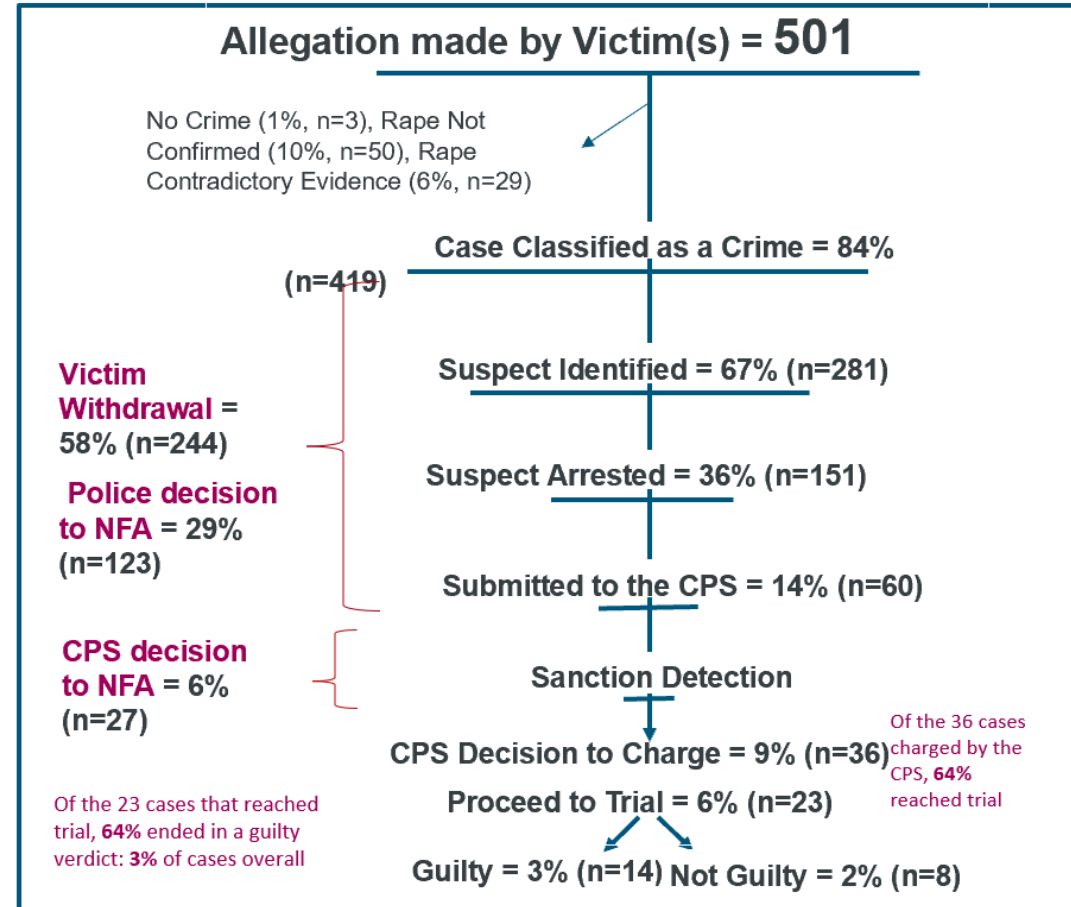
28% of allegations overlapped with Domestic Abuse

29% suspects had a prior police record

23% of victims/survivors were recorded as having an injury

7% of suspects were a complete stranger

On average, **18 months** from initial reporting to trial outcome.



Disadvantages and shortcomings

- Police system (CRIS) not designed as a research tool (only what's documented, not always mandatory, capture for policing purposes, walls of text)

Rape review - can we explore attrition in more detail?

Statistical analysis enables us to explore the predictors of certain specific outcomes (where numbers allow)... Two outcomes were further investigated in this manner:

- **Victim Withdrawal (244 cases)**
- **Police No Further Action (NFA) (123 cases)**

The strongest predictors of both victim withdrawal and police NFA were *procedural characteristics*.

What makes attrition more or less likely...

Victims are more likely to withdraw when:

- Multiple OICs (x8)
- Reported via the DASH (x3 more)

Victims are less likely to withdraw when:

- Participated in video recorded interview (x6 times)
- Suspect was family member (x4 times)
- Early evidence kit used (x2 times)

Police NFA was less likely when:

- Victim was under 18 (x3 times)
- Suspect involved in another rape (x8 times)
- Sought CPS advice (x10)

Police NFA was more likely when:

- Evidence casts doubt (x7 times)
- Inconsistent victim account (x7 times)
- no forensic opportunities (x5 times)



Draw new insights based on police data ...

Exploring those arrests in the London disorder of 2011

- After the London disorder of summer 2011, we explored public confidence; geography of the violence, the criminal backgrounds of those individuals arrested, links to gangs, Stop and Searches history...
- Learn more about those arrested... merged variety of data (CRIS, PNC, Stops) over 3000 individuals.
- 71% of arrestees had a previous conviction, caution, warning or reprimand prior the disorder offence.
- Arrestees began their criminal activity at a relatively early age, 41 per cent (of those with a previous sanction) had first been sanctioned before their 16th birthday, and 68 per cent before their 18th.
- Only 36 per cent had received their most recent sanction in the year prior to the disorder.
- 19 per cent of arrestees were related to gangs (these were more likely to have previous criminality, started offending earlier etc.)
- Those with **previous criminality, gang members** and those with criminality **in the year prior** the disorder were the most likely to be stopped and searched.

<https://academic.oup.com/policing/article/7/1/3/1446441>

Exploring Mental health through police data

Subsequent to the death of Sean Rigg, an Independent commission established by Lord Victor Adebawale. We developed a problem profile, interrogation of numerous police data systems, supported by surveys and wider academic literature to contextualise the results. Data explored included:

- Results demonstrated a heavy and rising demand - on average 165 calls per day involving mental health with clear borough variation.
- Out of the total of 231 taser deployments between September 2011 and August 2012, just over a third were linked to mental health in some way.
- The use of custody as a Place of Safety was explored, only in a minority of cases (e.g. in 3 years only .02% (n=258) of all detainments).
- Criminal profile of individuals with a mental health flag.
- Police Staff Surveys revealed perceived inadequate training.
- Surveys with wider police workers - gaps in terms of appropriate access to mental health partners.
- Our ability to scrutinise data sources was hindered due to a lack of rigorous data collection and capture. Indeed - we encountered paper forms that were being used to document important information.

Quality of much of the captured data was not empowering easy insights. Wider learning around bringing together performance analysts and social researchers.

<https://www.springer.com/gp/book/9783319206479>



Monitoring of public opinion

*Public perceptions are **key to British policing** – from Peelian principles to promoting active citizenship.*

*MPS and then MOPAC has **two surveys** that seek to reflect these viewpoints for Londoners and victims of crime.*

*These surveys contribute heavily to our insights and understanding across many issues and there are opportunities to use these surveys more in the day to day **learning and management of business***

About MOPAC's Surveys...

The Public Attitude Survey



12,800 Londoners
per year.

All residential
addresses in
London eligible.



400 interviews in every
London Borough per year -
weighted to be
representative.



150 questions, Face-to-face
interviews conducted in residents'
homes.

Survey focuses on perceptions of local **crime and policing...**



Social cohesion
& active
citizenship



Local crime
issues &
priorities



Perceptions
of the
police

Confidence
& trust in
police



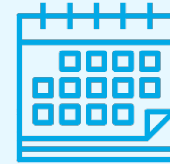
Personal
experiences
of crime

The User Satisfaction Survey



**13,000 victims of
crime** per year.

Victims of **volume crimes**:
burglary, vehicle crime,
assault, robbery or hate
crime.



Interviewed **6 to 12
weeks** after they
reported to police.



40 questions,
Interviews conducted
over the **telephone.**

Survey focuses on **experience of the police...**



Initial
contact
with police

Police
response
time



Police
actions &
investigation

Police
treatment



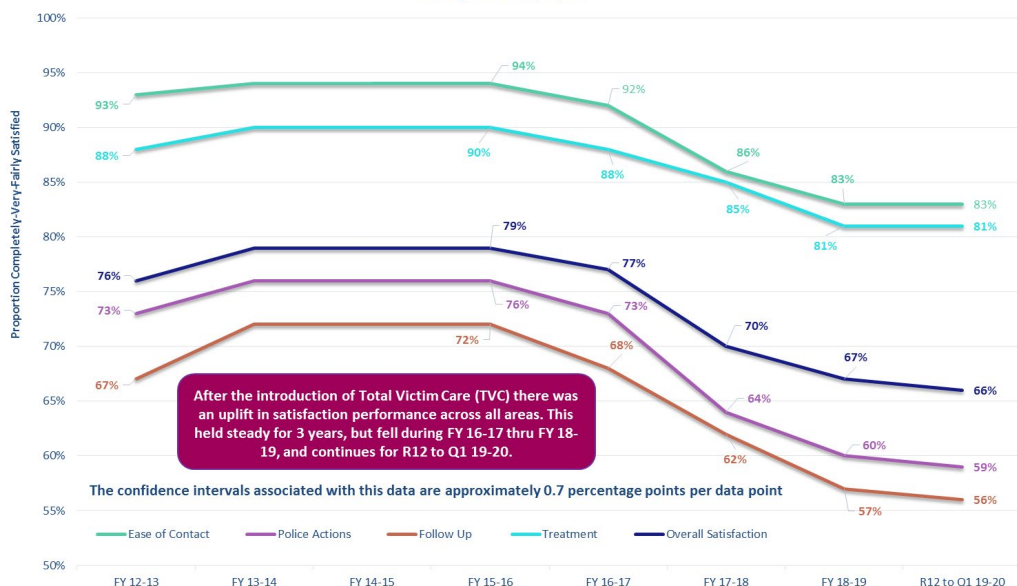
Overall
experience

Learning from the USS on victims within London ...

After a period of stability, victim satisfaction began to decline from 16/17.

Currently satisfaction with overall service is at 66%.

Overall Satisfaction and satisfaction within service areas
Rolling 12 months per point



What drives satisfaction?

Ease of contact: timeliness in contact method, succeeding first time.

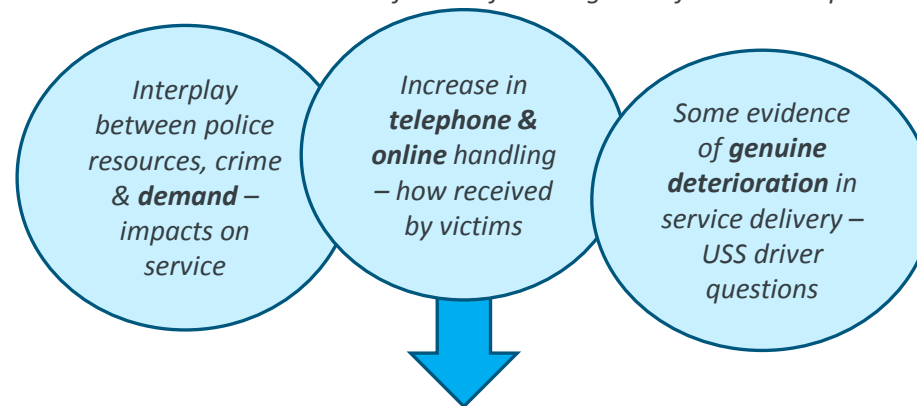
Police Actions: reassurance, providing a crime number and telling people what would happen.

Follow up: written confirmation of report, updates/notifications.

Treatment: being taken seriously and being communicated with clearly.

What's driving this decline?

A deep dive into the recent decline identified the following three factors as important:



Victims reporting via TDIU are...

- Less **satisfied** than other victims (56% vs. 67%)
- Less likely to feel **vulnerable** (51% vs. 59%) **BUT**
- Less likely to have vulnerability **identified** (if vulnerable) (62% vs. 75%)
- Less likely to feel **reassured** (56% vs. 69%)
- Less likely to be given the opportunity to provide a **victim personal statement** (38% vs. 48%)



The importance of managing expectations...

98% satisfaction if **exceeded**, 90% if **met**, 28% if **below**.

This highlights the importance of communication to public more generally about the victim journey.

Reassurance is key to satisfaction. This is true for all victims, but particularly plays out with more vulnerable groups...

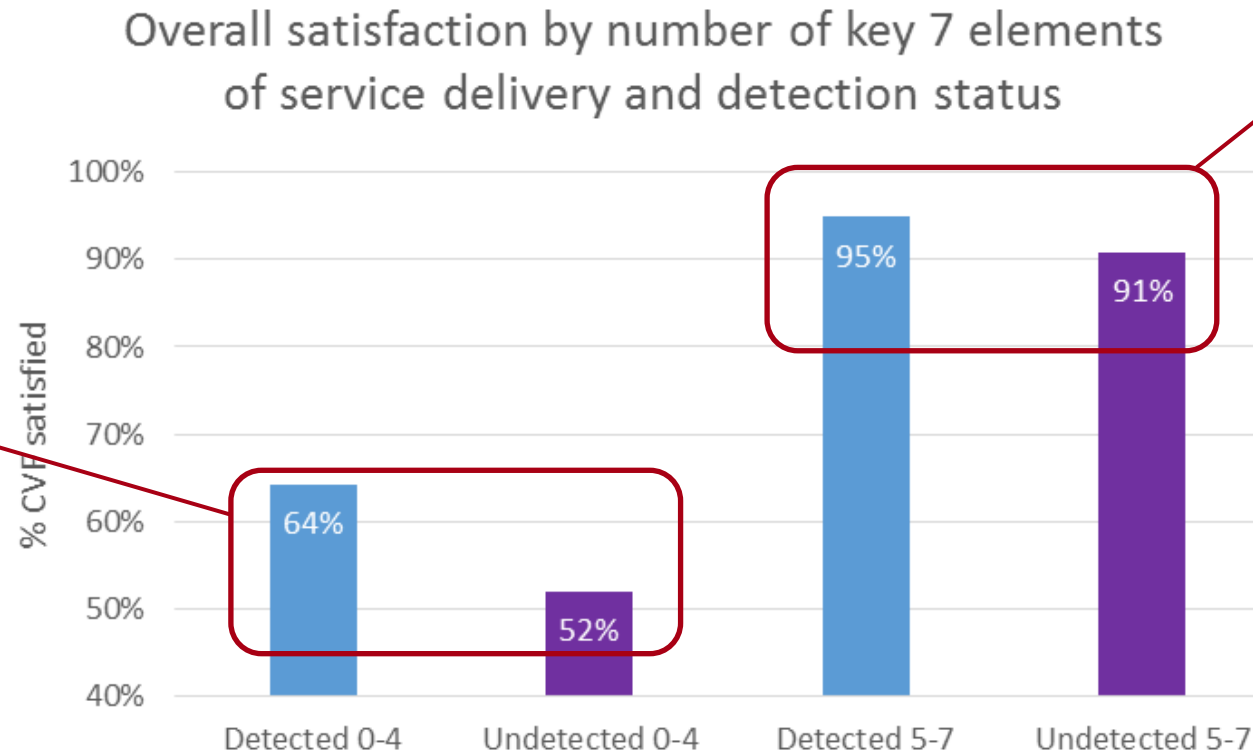
- Victims with a **Mental Health Issue** are less satisfied* (60% vs. 67%)
- **Repeat victims** less satisfied* (58% vs. 68%)
- **Vulnerability** needs identified and dealt with* (84% vs. 35%)

*Data from the User Satisfaction Survey FY 18-19.

... good process is more important than 'an outcome'

This applies to **ALL victims**, even those whom are **vulnerable!**

...However, satisfaction was significantly lower where there was a **poor service delivery, regardless of outcome.**



When 6-7 elements* of a **good service delivery** were present...

...there was only a **marginal difference** around satisfaction between whether the crime was **detected** (95% satisfied) or **undetected** (91% satisfied).

But... TDIU victims are just as satisfied as non TDIU when they perceive an effective service

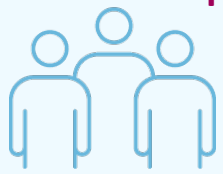
When using the 6-7 elements* of a good service delivery as a marker, there is **no difference** in satisfaction between TDIU and non-TDIU victims when delivery is complete across these factors (92% vs 90%).

*Scene investigation, explain what is happening and why, information on victim support, offered a personal impact statement, informed about restorative justice, reassured and taken seriously.

*Data from the User Satisfaction Survey FY 18-19.

A spotlight on Inequalities in Public Perceptions...

Londoners from a Black or Mixed Ethnic Background tend to have more negative perceptions of the police.



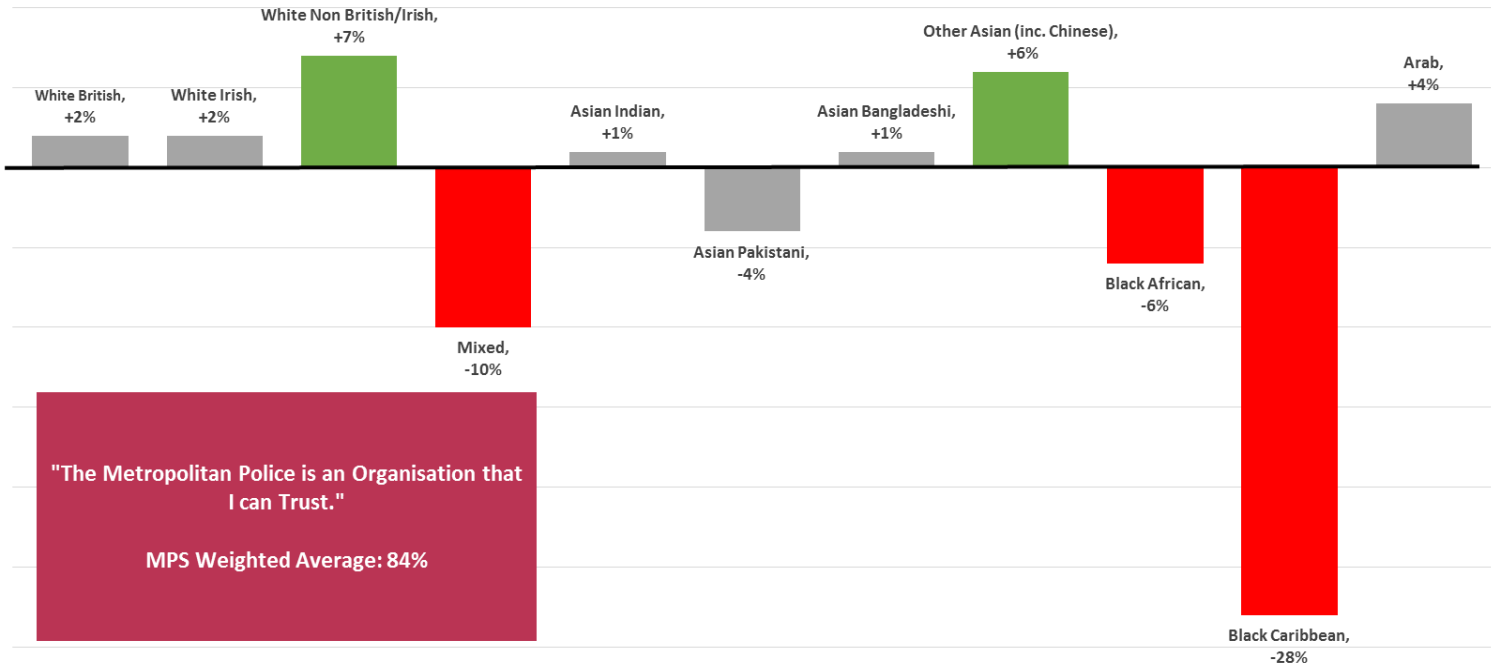
Gaps seen for Black Londoners are predominantly driven by **Black Caribbean** residents,

e.g. -23 pp. gap in fair treatment.

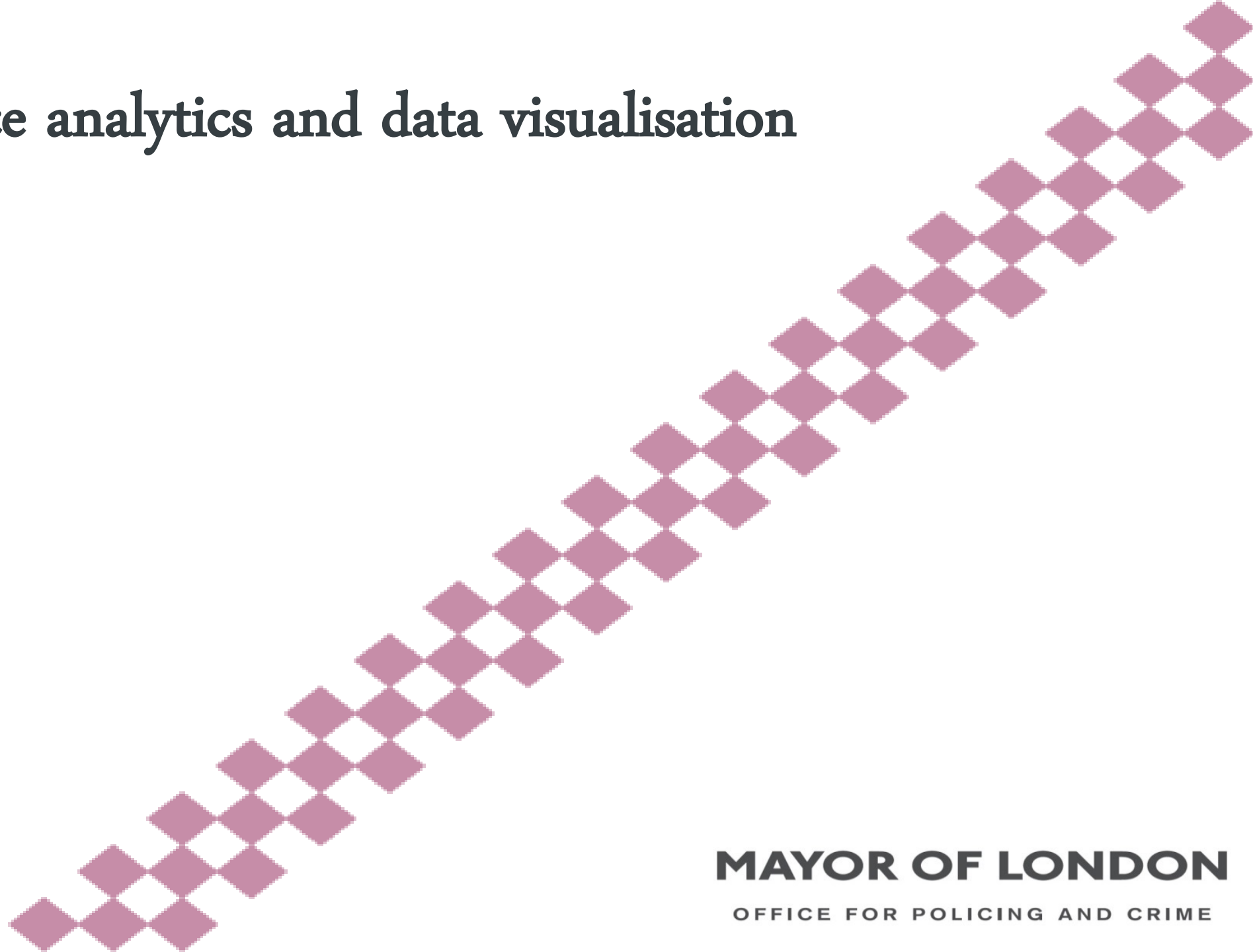
This pattern goes **wider**:

- Trust in the Metropolitan Police Service (-28 pp.)
- Support Stop and Search (-16 pp.)
- Willing to help police by providing info (-15 pp.)

	Relied on	Fair treatment	Dealing issues	Listen to concerns	Informed local	Contact ward officer	Good Job Local
Weighted MPS result	73%	76%	65%	69%	38%	13%	62%
White British	-3%	-1%	-2%	-1%	3%	3%	1%
White Irish	-5%	1%	-2%	0%	-3%	3%	-5%
White Other (Non British/Irish)	6%	8%	7%	6%	-3%	-4%	7%
Mixed	-5%	-14%	-11%	-12%	-7%	-1%	-9%
Asian Indian	0%	5%	3%	2%	1%	-3%	0%
Asian Pakistani	0%	0%	-4%	-7%	-3%	-2%	-7%
Asian Bangladeshi	3%	-2%	1%	0%	-1%	-4%	-12%
Other Asian (inc. Chinese)	5%	8%	11%	8%	-1%	-4%	7%
Black African	4%	-7%	3%	4%	-2%	-2%	1%
Black Caribbean	-13%	-23%	-16%	-14%	-12%	2%	-13%
Arab	7%	4%	8%	6%	2%	-3%	5%



Performance analytics and data visualisation



Measuring the things that matter...

A key aspect for the Mayor and Deputy Mayor was what success is for the MPS...?

Previously MOPAC had *six blanket numerical targets* – these were the ‘measure’ of MPS in view of the Mayor. i.e., - there was a 20% reduction in key volume crime types (MOPAC 7) (*no vulnerability / high harm and even if you didn’t present problem in the areas*).

Potential negative impacts of numerical target setting.

Chasing figures? Gaming of system? Impacted heavily by any recording changes.

What gets measured gets done? Performance cultures? Quality of recording?

Perverse incentives? Cause for concern and anxiety for staff? Harm a learning culture?

Certain crimes reducing by a set percentage *doesn’t mean overall the service is ‘good’!*

My role – bring a more sophisticated conversation through the data

1. Move beyond purely 'crime' and targets and enable local decision making.
2. Raise the profile of Higher Harm offences and repeat victimisation.
3. Consider issues around tackling inequality and vulnerability.
4. Ensure victim voices are core.
5. Incorporate Londoners experiences and perceptions into defining success.

An innovative performance framework ...

A Safer London

A focus on **volume**
and **high harm**
priorities

(MOPAC in consultation
with MPS and Local
Authorities)

Mandatory

High Harm priorities

Action plans & problem solving
Trajectory and monitoring
Some volume may go up
Repeat victimisation decrease

Sexual offences, Domestic Abuse,
Hate Crime, Child Sexual Exploitation,
Weapon based (*Knife & Gun*)

ASB plus

Two volume Priorities

Provision of tools (borough & ward: rank, trends, peaks)
Problem solving action plans (locally driven,
geographically focused (i.e., vulnerable areas).
Annually refreshed

Local priority may be evidenced by:

*Theft (from MV, shops, person), Non DA
VWI, Common Assault, Harassment,
Burglary dwelling, Criminal Damage,
Robbery person*

A Better Police Service for London

(MPS)

Active monitoring & reporting – looking for improvements within:

- Victim Satisfaction with police service (MOPAC's User Satisfaction Survey)
- Improve public perceptions towards the police (MOPAC's Public Attitude Survey)
- Challenge the inequalities in Satisfaction & public perceptions (i.e., BAME present lower perceptions)
- More representative Police workforce (More BAME/ More female recruitment)
- Police officers/staff treated with fairness and respect by colleagues (MPS Staff Survey)

A Better CJS for London

(CJS / MPS)

Active monitoring & reporting – looking for improvements within:

- Reduce *offending behaviours* of targeted cohorts (i.e., offending, frequency, severity)
- Better service for victims (i.e., VCOP compliance – victims kept informed and referred to services)
- Improve victim satisfaction with the service they receive through the courts (**new survey for London**)

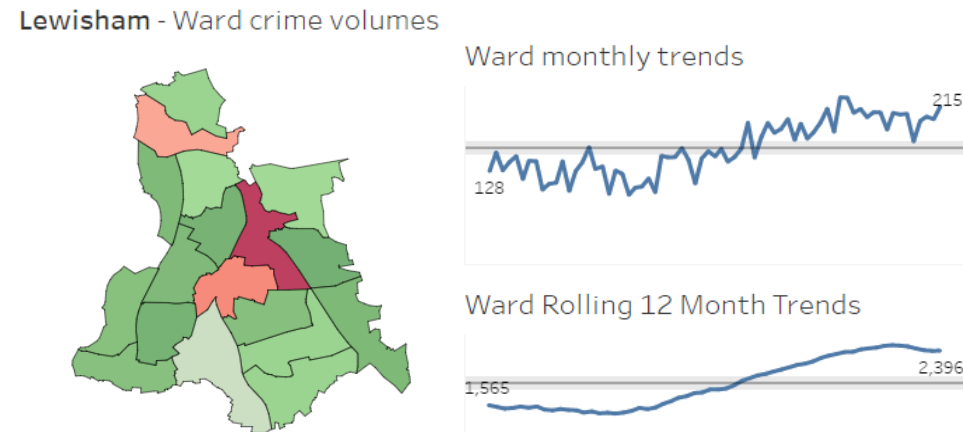
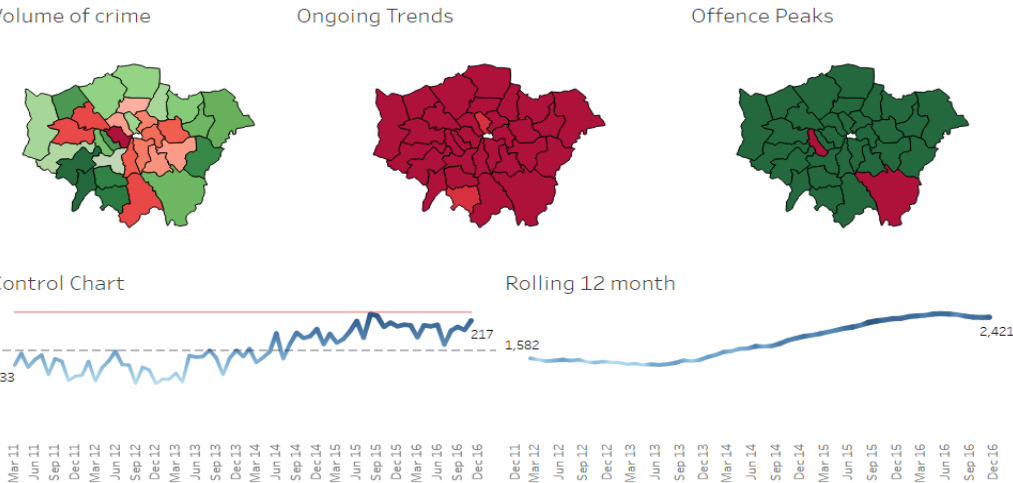
MOPAC will continue to routinely monitor ***all recorded crime*** & ensure action

Data driven conversations, transparency and oversight

Multitude of Public dashboards linked to priorities.
Enabling data driven conversations, transparency and oversight.

1. Choose offence type
Common Assault Offs

2. Choose Borough
Lewisham



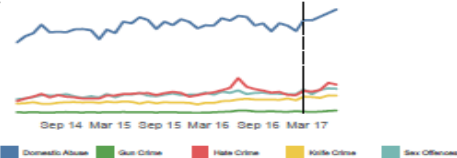
Measuring the things that matter

MOPAC performance framework >>

One of the most important roles of MOPAC is to oversee the MPS and provide scrutiny in keeping London safe and delivering on the commitments in the Police and Crime Plan. To oversee performance a new framework has been developed - one that goes beyond blunt measures and targets into a more sophisticated discussion of success. The below presents the key measures:

Choose borough
MPS

High Harm Crime



Gun crime and domestic abuse continued to increase during July '17. Slight reduction in other high harm crimes can be seen, volumes remain high.

Repeat Victims

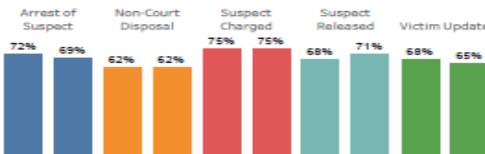
MOPAC is working with the MPS to analyse repeat victimisation in London and define how the Police & Crime Plan's priorities in this area will be measured

Public Perceptions

	% Agree	London BAME Gap
Victim Satisfaction	75%	6.3%
Know how to contact your local team	33%	0.2%
Listen to the concerns	74%	2.3%
Dealing with the things that matter	77%	2.1%
Local information provision	44%	0.3%
Police can be relied upon	79%	0.2%
Treat everyone fairly	79%	3.6%
Local police do a good job	69%	4.3%

MPS results remain stable however the gap between the BAME and white population has exceeded 6% for satisfaction but has reduced to 4% for good job.

Information supplied to victims (6 months vs Current month)



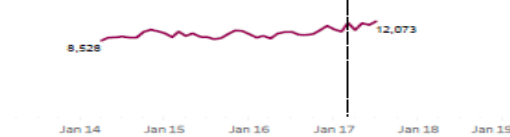
Compliance with the victims code remains steady across most measures.

Volume Priorities - Count Increasing or Decreasing



During the most recent 12 month period 18 of the 67 chosen volume priorities have decreased across London compared to the previous rolling 12 months.

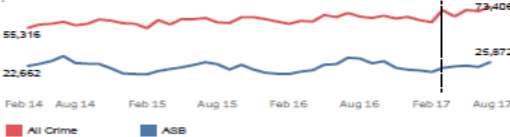
Chosen Volume Priorities



Each borough has selected 2 volume priorities. During June '17 these have increased by nearly 700 offences in total across London.

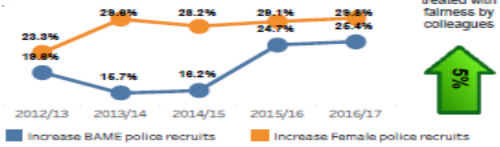
[Click to view borough crime priorities >>](#)

All Crime & ASB



ASB calls have increased during July '17, overall crime has also increased compared to Jun '17 by over 4,000 offences.

Representative & Fair Police Workforce (MPS level only)



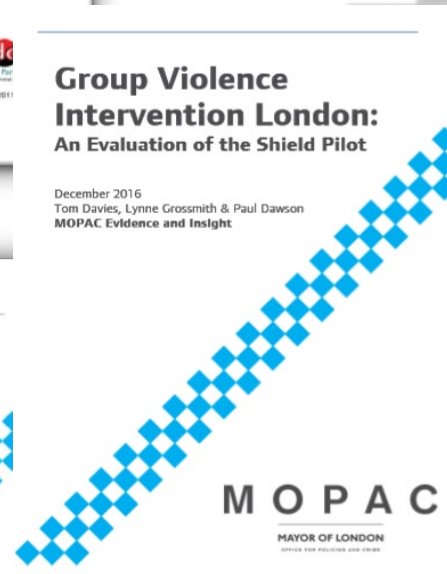
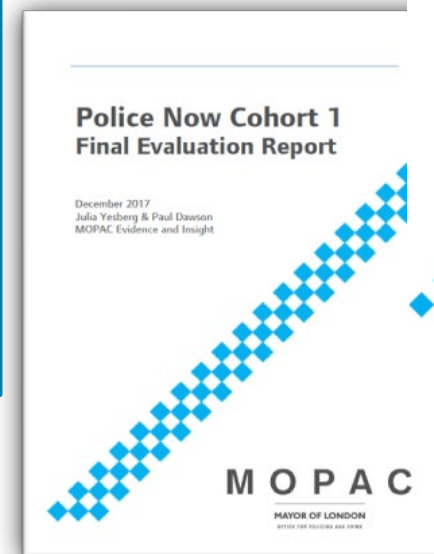
The MPS have increased their recruitment of BAME and female officers over the latest period compared to the same period last year.

And finally...



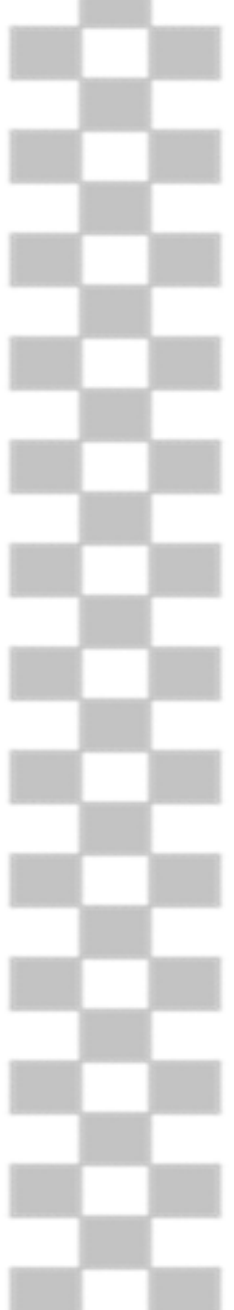
Find your voice, your allies and a thick skin...

- We made our name in challenging from within (politely).... Upholding research integrity (i.e., honest reporting... delivering negative findings) can sometimes be bruising...
- Sometimes results can be seen as 'risky'
- How does an organisation learn from challenging findings?
- Wider receptivity of the culture
- Find your data allies and work with those that get it.
- It can sometimes take years for this to happen



Final reflections and good luck...

- Proud of the craft of analytics
- Not perfect - but at MOPAC we have a motivated majority
- Moved beyond analysis (policy and programme design and now links into policy & programme design (working with Directors and Deputy Mayor)
- Genuine influence
- E&I are still evolving... moving from individual to organisational approaches
- Evidence won't root from the periphery. Not from individual projects. Not from external universities. All are welcome – but change should be driven from inside.
- Analysts have a role – more so than they may realise to shape the conversation....



Appendix



Blurring different analytic skill-sets ...

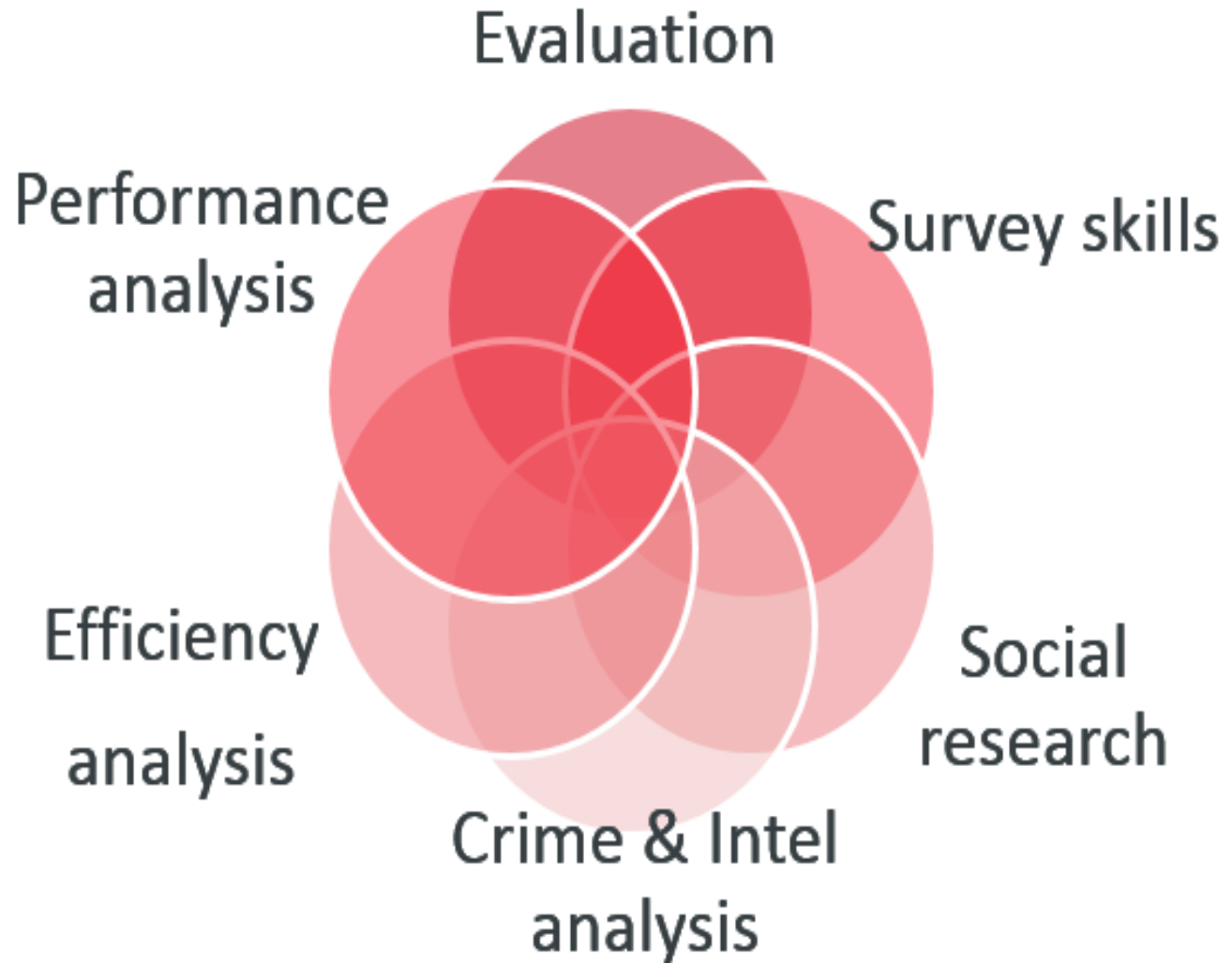
I have a multi-disciplinary team skill set across the team (*where available*).

Individuals have a main area, but encouraged to blend into other crafts.

More tools, more strings, more options...

Transferability of these crafts!

If you can document performance information – with some minor tinkering, this can become evaluation...



Page 7 of 7

1

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3

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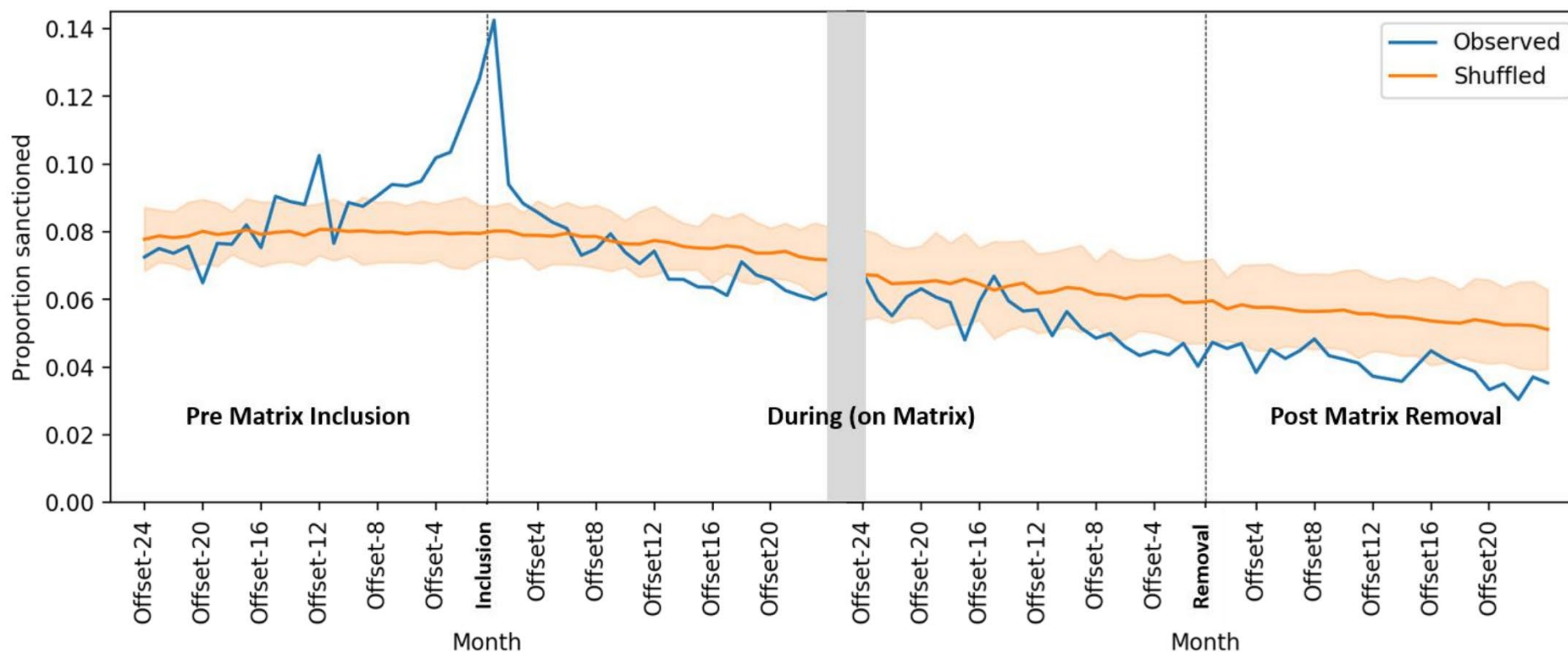
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Page 7 of 7

Better – we can also create the comparison groups

The London Gangs Matrix provided many challenges that made the comparison groups very hard to identify: **Pan London** (no-where within London without Matrix individuals); **Historic** (previous 6 years of individuals with differing start and end dates); **variation in selection** (borough variation and staff involvement in selection).

Graph 5: Proportion sanctioned by month (within-group reference point shuffle)



Our RCT on Body Worn video

MOPAC, MPS and the College of Policing (CoP) conducted (until recently) the **largest urban** Randomised Control Trial (RCT) of Body Worn Video (BWV) to date. Previously promising results from other police forces – albeit much smaller.

Approximately **450** available cameras split across response teams within 10 boroughs

Emergency response teams selected for the pilot as they enable BWV to be deployed in a wide variety of situations and will make the admin and back office functions more standardised/cheaper.

10 Boroughs identified through analysis, those with high rates of our primary outcomes.

Within these, 2 teams per borough to receive cameras and 3 teams in the control group. Teams **randomly** selected.

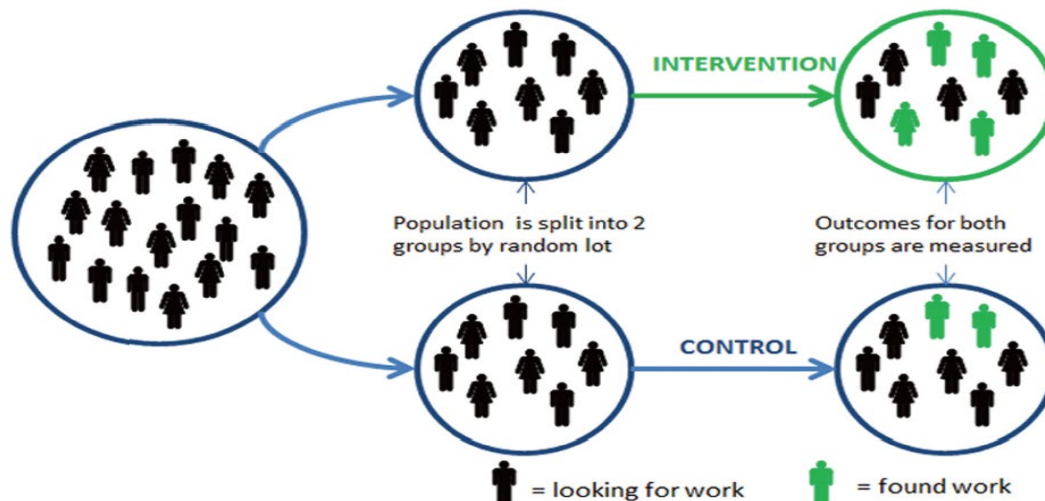
Findings ...

- Can reduce complaints
- Reduces allegations against police by 33%
- No difference on the number of Stop and searches
- No difference on how the police interact with the public
- No difference in likelihood of an arrest for violent crime
- Public opinion very positive to the innovation.

Report

https://www.london.gov.uk/sites/default/files/bwv_report_nov_2015.pdf

Basic design of a randomised controlled trial (RCT). Source adapted from Cabinet Office 2012



Evaluating Offender Management

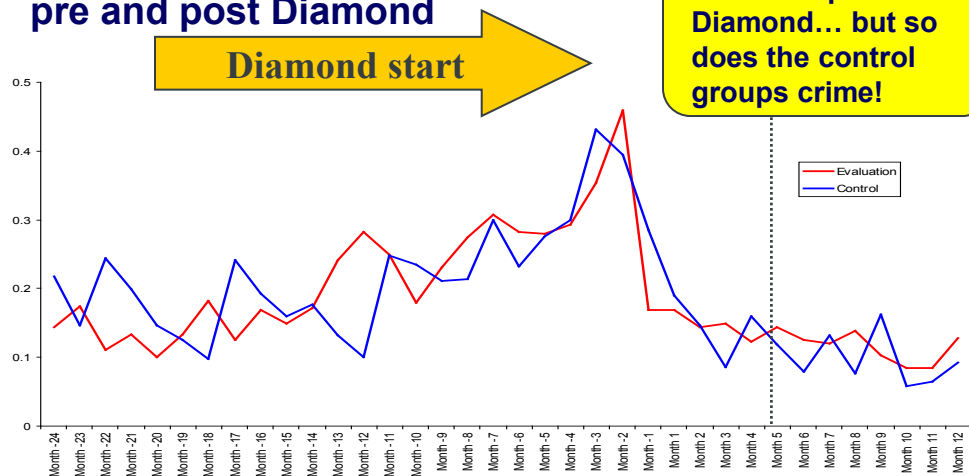
Background

'Diamond' was an 11 million pound, two year Offender Management initiative run in 6 London boroughs 2008-10. It was advertised as **'successful'** before publication of the evaluation!

It offered an integrated approach to managing short sentence offenders in some of London's most challenging areas. Our evaluation is recognised as a touchstone in the evaluation of offender management initiatives.

The evaluation included offender interviews, staff interviews, on-line surveys, criminal career analysis, generation of a statistically matched control group and economic analysis.

Average offences per month pre and post Diamond



Diamond was discussed in...

1. The House of Commons
2. Channel 4 news
3. The Sun newspaper

Results

We found **no evidence of impact of Diamond on reoffending comparing Diamond individuals to our control group** (similar offenders in similar areas) **over a 12 month reconviction analysis**. This examined: reoffending, severity, speed to offending & frequency – no differences found.

Matching was done at a borough **and** ward level (matched on population, drug crime, acquisitive crime, deprivation, age of population, education, prison releases).

Wider learning

- These were not popular findings.
- **Implementation, implementation, implementation! Don't want good research on bad schemes. My biggest headache.** Only 1 good scheme!
- I always talk about this – bore staff at work.
- Risks of conducting evaluations – can be seen as risky with negative results.
- **How do we learn from bad news?** Is a learning culture in place? This can be difficult to take sometimes... but essential.
- **Value of the control group – without we'd have thought Diamond was a success!**
- Perception to Diamond – we had wrecked careers... Actually it was the opposite and we were able to lay the groundwork for future offender management in London...
- **Even through negative findings – eventually - Diamond learning is helping to shape the future of IOM in London.**