



ETHICS COMMITTEE

Monday 14th December 2020, 13:00 – 17:00 hrs

Meeting held virtually via Zoom

Present:

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| Marion Oswald (MO) | Chair of Ethics Committee |
| Jamie Grace (JG) | Vice Chair of Ethics Committee |
| Thomas McNeil (TM) | Strategic Adviser to the PCC & Board Member - OPCC |
| Anindya Banerjee (AB) | Ethics Committee |
| Claire Paterson-Young (CPY) | Ethics Committee |
| Tom Sorell (TS) | Ethics Committee |
| Malcolm Fowler (MF) | Ethics Committee |
| Janine Green (JG) | Ethics Committee |
| Jennifer House-go (JH) | Ethics Committee |
| Derek Dempsey (DD) | Ethics Committee |
| Andrew Howes (AH) | Ethics Committee |
| Rebecca Hemmings (RH) | Ethics Committee |
| Rachel Holtham (RH) | Secretariat - OPCC |
| Gareth Morris (GM) | Superintendent, Birmingham West NPU |
| Davin Parrott (DP) | Data Analytics Lab – WMP |
| Samantha Todd (ST) | Data Analytics Lab – WMP |
| Patrick Blackwill (PB) | Data Analytics Lab – WMP |
| Karl Shutes (KS) | Data Analytics Lab – WMP |
| Scott McGarrigle (SM) | Response Manager – WMP |
| Chris Todd (CT) | Detective Chief Superintendent - WMP |
| Nick Dale (ND) | Superintendent, NDAS – WMP |
| Matthew Tite (MT) | Force Incident Manager - WMP |
| Sandra Dubidat-Ferguson | Project Manager – WMP |
| Sarah Galloway | Inspector – WMP |
| Mandeep Dhensa (MD) | Accenture |
| Luke Robertson LR) | Accenture |
| Emre Erdem (EE) | Accenture |
| Charlotte Hickman (CH) | County Lines Strategy – Home Office |
| Nick Morgan (NM) | Serious Violence Analysis – Home Office |
| Amy Watson (AW) | Serious Violence Strategy – Home Office |
| Sanjit Kahlon (SK) | Head of Digital Policing Policy and Observer - Home Office |

Apologies:

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| Peter Fussey (PF) | Ethics Committee |
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| 1 | <p>The Chair welcomed everyone to the meeting and thanked all for their feedback on the self-assessment forms. TM mentioned a roundtable of National Police Chief council leads for ethics and data analytics and also Director of Data from the Home Office for a National Institute/proposal taking place in the New Year and will provide a further update.</p> |
| 2 | <p>Project Guardian and the tasking of the violence projects</p> <p>GM delivered a presentation and brief overview of Project Guardian and following points were made:</p> <ul style="list-style-type: none">- GM noted that he has two roles, Superintendent in Birmingham West and over summer was awarded the lead for Project Guardian which is the Force lead for youth violence and knife crime.- The lead is partly supported by the Home Office surge funding.- The aim is to reduce the number of hospital admissions of knife crime and associated injuries served from violence and to reduce the occurrence of knife crime and reduce most serious violence.- A lot of Government's funding and aims reside on the under 25 cohort.- In 2019 the West Midlands saw a 17% rise in knife crime and have a continuing struggle with violence at the moment and although violence is down in 2020, this is predominantly to do with COVID and lockdowns rather than any particular successes.- The funding of the project is portioned in two ways, part of the funding is for the Violence Reduction Unit (VRU) and part is driven around surge activity which is predominantly focussed on use of overtime, on additional police on the ground and night time economy (NTE) support.- Due to COVID violence around NTE has decreased but an area that has sustained are the afterschool patterns, of under 15 year olds, 3pm – 6pm spike in violence still remains a significant challenge.- Initial observations from the team was around the fact they were responding to pockets of violence in locations, and often the following days or following week was very much reactive, take that in contrast with the VRU who are focussing on longer term interventions.- Fully recognises there is disproportionality with knife crime and with violence, this plays out across gender, background and stop and search disproportionality and representation within the Criminal Justice System and very mindful on the reasons of this. Police in part responding to the deeper systemic inequalities in society around deprivation and responding to some of the outcomes of that which sometimes manifest as violence and exposure to criminality.- Alongside the VRU, one of the aims set by the Deputy Chief at the time was to try and look more at problem solving and more getting strict with the funding that was allocated, and the Home Office expressed a desire to re-profile some of the research funding spending into more problem solving and longer term activities.- So rather than have the task force bounce about different areas where they've seen violence, they are now embedded in Coventry and |



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| | <p>Birmingham, and also within key violence hotspots and where clear geographical spatial patterns of violence are seen.</p> <ul style="list-style-type: none">- Analysis being considered today looked, not just at where violence occurred, but where the offenders came from, where they lived, where they were schooled to channel where engagement in schools took place.- Have received funding support for areas such as virtual reality (VR) programmes, which are fantastic ways of engaging with young people. There's a pilot in the last few months in Sparkbrook, and seeking to increase the acquisition and use of that around knife crime and serious violence and gang criminality.- There is a need to understand those localities so we are able to be more precise about where investment is best placed in school based interventions and the local work with the VRU to make sure in the right places.- Work ongoing with some health based services, where victims of serious violence are visited by an individual to talk through why they're there, hopefully at a point for intervention. There is a version in Southside in Birmingham, which is a forward based health and refuge facility, looking to expand that over the next one to five years depending on data of violence patterns.- In conversation with Wolverhampton and any other night-time economies to understand why interventions work. There will be no output to an individual data level; instead gives an area and locality, with aim being to drive that public health approach between police, Violence Reduction Unit and partners to make sure that intervention and diversion activity runs in the right locations.- Developed detailed intelligence products for each geographical area, which will hopefully be supported by this data if it's approved by the ethics committee, the data was looking at other elements, such as organised criminality, county lines, exploitation and the profile of where violent offenders and victims live and are scored, to make sure locations with the value are the right locations. |
| 3 | <p>Presentation of violence forecasting proposals</p> <p><i>3a & 3b - Long-term forecasting of violent crime and knife crime – proposal</i></p> <p>DP delivered a presentation and the following points were noted:</p> <ul style="list-style-type: none">- For both proposals they are looking at predicting crime numbers and broad locations.- Since 2015 both violent crimes and knife crime have been trending upwards.- There are many more violent crimes than knife crimes.- The two in principle documents explain models around predicting violence, essentially producing longer term projections over one to five years. |



- At present we anticipate the long-term projections examining broad numbers of incidents over time and (possibly) over broad locations.
- Results would be used to inform strategic decisions about the prioritisation of investment from the Home Office and OPCC.

The Committee had the following questions:

- Questions were asked about the long term predictions - it mentioned looking at predictions for one to five years, can it be more specific about that as it seems like an extremely wide projection range? DP noted that was the analysis that was requested. GM added it was a fair observation, but that there is the need to be thinking more long term if we're looking at getting into schools. Because of the sort of violence, if predicting only just a short time in advance then actually it may result in missing the scope of the school cohort and that optimal age, which is generally around the age of 11 and 12. So to get in front of the cohort when they start offending, potentially at the ages of 15 or 16, then actually having that longer term prediction is important. This is the rationale behind the timescales. But until we actually start looking through the data, we don't know if the event will hold any degree of accuracy.
- It was noted that often we talk here about hotspots for crime but the 'hot point' that can be particularly relevant for ensuring justice is done or good crime prevention work is around the receptions at police stations. Officers have multiple things to think about and it is at these stations that there is potential for discrimination. The things that happen at the custody desks, need to be looked at more carefully. GM noted that custody is only one data point, there are a number of other data points before that including schools. But right that disproportionality is something that remains a significant challenge. Some of the reasons behind that are more complex than just looking at it from a police response angle. Sometimes they are due to housing, due to deprivation, poverty issues that arise having the disproportionate impact on communities including around Covid related disproportionality.
- It looks like some of the interventions on the list will require lots of extra resource, have any workings been done to check this will be available and realistic? GM noted they were mindful of the economic position the government finds itself in at the moment but funds will continue for activity for at least the next 12 months. The aspiration is for the violence reduction work to continue, but much of the work is also around working with the VRU, working with educators or working with public health to improve the precision of efforts. . So, there is absolutely a challenge around resource. Over the last few years, there has been a considerable amount of money invested in addressing violence, albeit much of it focused on policing. But our initial indications, prior to COVID striking, would seem to take more of a problem solving, intervention and analytical support approach for the following two years.

3c - Analysis of school catchment areas and violence – proposal



DP delivered a presentation and the following points were noted:

- Project Guardian / the VRU undertake activities in schools with a view to helping reduce violence over time.
- A question arises as to which schools these activities should be undertaken in.
- This project would undertake exploratory analysis of the locations of violent offending and overlay this with open source data relating to school catchment areas, i.e. it is designed to identify new insights into where young people who might be vulnerable to committing crime or based to better inform where interventions are made.

The Committee had the following questions and comments:

- Regarding school catchment areas, a question was posed as to whether they actually exist anymore because of the way that schools recruit -What happens about children which don't fall into neat categories based on catchment areas? DP noted that the origin destination matrix (as show in below image) would help provide information and try and ascertain probabilities in terms of age and who potentially have been involved in violence from Ward B going to school 1, 2, 3 or 4 etc.

| Origin | Destination | | | |
|--------|-------------|----------|----------|----------|
| | School 1 | School 2 | School 3 | School 4 |
| Ward A | 0.8 | 0.5 | 0.05 | 0 |
| Ward B | 0.1 | 0.3 | 0.01 | 0.02 |
| Ward C | 0.05 | 0.1 | 0.1 | 0.05 |
| Ward D | 0.05 | 0.1 | 0.3 | 0.04 |

This is to try and get an idea as to which schools should be prioritised for supportive interventions. We can see what other school-focussed information is available out there in order to try and make informed decisions, but there is a question over the role of school catchment areas for those committing violence, and the degree to which people who are going some distance outside of their areas into or at other schools to commit crime. Ultimately some of these supportive programmes will be delivered via schools, and it's not the schools themselves that are of interest for this analysis. They're of interest in so much as it allows you to be able to interact with pupils who are in danger of being victims or perpetrators of violence. So it's trying to make sure that we don't miss out on a significant cohort due to missing information about whether vulnerable young people are based.

- It was noted by Committee members that there are a number of different uses that can be made from catchment data. The point was made that it can be purely exploratory so that you come up with some data, which then suggests a hypothesis about where some people who are involved in violence come from school wise, and you could then try to verify those



hypotheses with people in the school as part of the general quasi therapeutic approach that you've got with the virtual reality initiatives. Notwithstanding this fairly 'exploratory' proposal, the way it is expressed could be seen as suggesting the project will be able to actually indicate something fairly firm about how we profile a catchment area, or how we profile people from a neighbourhood (i.e. because the catchment area is sometimes a proxy for a neighbourhood). So if it's meant to be used in this exploratory way, that's something that needs to be communicated to everybody involved to avoid undue reliance on its insights. DP noted that they certainly see it as being completely exploratory and as it stands wouldn't be used for anything other than informing which schools could receive the attention of the VRU, for example.

- The Committee further note that the above point is really important in terms of how the results might be shared, particularly because there's some indication that the results will be shared with various other agencies who are part of the unit. This is therefore something to think about in terms of handling requirements, etc.
- The Committee as about any links with exclusions data and whether schools are going to get more targeted help from the police. GM noted that the exclusion rates are something that certainly in Scotland, and in wider studies undertaken, have shown a strong link with those that end up involved in criminal violence. There's an absolute focus there and as data is developed and explored there is a need to be looking at alternative education providers, and work with special education providers, and looking at exclusion rates as well.
- The Committee noted that the list of interventions available appear positive but asked, will it benefit the right students if they're not in school? GM added that they look at some of these interventions, and look at some of the measures that have been pitched or are being pursued and developed with the VRU and a bit more cemented in Scotland where this process was commenced. There are some objectives around 'stay in school' initiatives to work with schools to try and mitigate exclusions and to try and mitigate those children that end up in alternative education providers, recognising that once the child starts to go down that route, they are at significantly greater risk of becoming a victim or involved in violence.
- A member of the Committee expressed discomfort with some of the language used in the report, and proposed changing the language to children and young people as opposed to offenders, and noted it could be, worryingly, described as violent offences committed by children. DP noted that quite often the language used in the papers is terminology that's currently used by WMP, so given that the results need to be communicated with somebody in WMP, would need to be able to speak the business language. But in terms of that point, we can accommodate that in the final report and just make that clear.



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| | <ul style="list-style-type: none">- It was noted by the Committee that presumably because this is being set out as a project proposal in principle, there is an open mindedness to the fact that it might not actually have that much predictive value when the data is actually looked at. DP noted that they certainly weren't planning on using it in a predictive fashion as it stands at the minute. Further questions asked whether it's simply about understanding the existing data better to inform how you target interventions. DP added it will just be to look at available data and explore if we can generate an origin destination matrix or if it's useful in terms of prioritising resources, and that it is not intended to make any predictions. It was asked if there would be anything else that might be undertaken alongside the list of potential interventions. And if so who would decide on that? GM noted it depended on if the data is found to be reliable and what it tells us. They have a comprehensive delivery plan that at the moment is going up to the Executive team for the VRU. GM emphasised this is only the Guardian side, it doesn't encompass the VRU educational side, but happy to share that with the Ethics Committee if they'd like to have a look through that document, which talks through some of the interventions and measures they are seeking to adopt into it and to develop. It was noted that this would be useful background for the Ethics Committee to have. |
| 4 | Coffee Break |
| 5 | Presentation of Analysis <i>5a – Violent Crime Predictions (4 weeks)</i> DP delivered a presentation and the following points were noted: <ul style="list-style-type: none">- The aim was to try and predict the number and location of violent crime over a 4 week period, i.e. short term predictions.- Violent crime has seen a general increase since 2015, it also tends to happen more often at weekends.- Violent crimes generally increase in summer and December.- In terms of violence it tends to concentrate around the centres, but certainly within Birmingham West, it tends to be fairly consistent from the year 2015 through 2019.- For both this model and the knife model, we have split the WMP area into essentially a 40 by 40 grid (spatio-temporal model) so you end up with squares circa one square kilometre, which is what we're actually looking to try and make predictions on for a forthcoming 4 week period. <u><i>The Committee had the following questions and comments:</i></u> <ul style="list-style-type: none">- It would be helpful to look at how well the model predicts and to look at the predicted map and compare it with an actual map overlay to see how predictive the model is. DP noted that this is something they could provide and will share with the Committee. |



- A member noted that it was previously mentioned regarding the previous models that the objective was long term predictions. The member asked whether the modelling methods here were essentially the same despite now making short term predictions. DP added only in terms of the exploratory analysis; we anticipate at the moment that the actual methodology used for making any predictions will be somewhat different, because the longer term ones would likely have different technical requirements compared to the short term predictions. And it might well be that the unit of analysis will be different as well - it's highly unlikely that we'll be looking to make predictions on this grid pattern on a longer term basis. So essentially, they are treated as completely separate projects.
- As far as you can tell with the performance of your short term models, are you happy with the results? Because based on the information provided, it appears they don't do terribly well in the highest crime areas. DP noted that they certainly seem to be doing okay and they certainly accurately pick up on the main areas. Specifically, they seem to be doing better than just using a straight map of hotspot areas in terms of providing new insights into the location of offences, as opposed to the number of applicable offences.
- It was questioned how predictive this model could be with the low numbers of offence data inputted. DP acknowledged that and added that it would be used as a guide to where events 'may' be occurring, and potentially more strategic than not looking at the data at all. There are similarities throughout time in terms of where in and around the city centres, particularly in terms of violence. It's more likely to help feed into where various activities of the VRU and Project Guardian should be undertaken as opposed to informing a proactive tactical policing intervention(s). It has been proposed that the model be refreshed every four weeks, to produce maps of where things might be more likely to occur and what the likely numbers are and that would then feed into the tasking process of Project Guardian. The four week block is chosen because that tends to be tasking cycles for various projects.
- There isn't yet clarity on exactly how it will be used? DP noted that originally it was just to be able to inform where activity might be undertaken in line by the VRU and Project Guardian, but it would be GM who would be the predominant recipient of these results.
- It was noted by the Committee that there is an exclusion of domestic abuse and sexual offences – is this because the work is for the VRU, or some other reason? DP added that it's probably because it's for the VRU, but it's also partly because there seems to be some differences between domestic abuse and violent crime by nature, and therefore appropriate to be treated separately.
- Clarity was sought about whether the model was looking to predict five, four week periods ahead. DP responded by confirming they were going to explore how well the model is able to predict further in advance, but that mainly it was looking to predict just one four week period, not five.



- In relation to training data, the Committee asked whether it was correct that the model assumes that the future four week period will be treated as training data in due course. DP said the training data is the previous data, and the future four week period would be the test of the training data's predictive qualities.
- Referring to page 14 of the agenda item 5a, Violent Crimes Predictions document, the Committee suggested that the scatterplot of observed versus predicted doesn't look very compelling, and asked if the Lab could try to persuade the Committee that the prediction is doing something useful? DP responded by saying that it would appear as though it's probably doing better than for example, just using the hotspots.

5b - Knife crime predictions (4 weeks)

DP delivered a presentation and the following points were noted:

- The aim was to predict number and location of knife crimes (used causing injury) over a 4 week period, as opposed to violent offences more generally.
- Knife crime has seen a general increase since 2015.
- Knife crimes tend to increase on weekends and seems to be an increase over summer – there are clear similarities with the violence predictions.
- There is also a concentration in and around central areas.

The Committee had the following questions and comments:

- The Committee again asked for comments on the model's performance. DP said we have found that the model is better at predicting than current forecasting analyses.
- It was noted that there was notable rise in December rates in regards to the predicted violent crime compared to knife predictions – what was the Lab's reflections on why that was the case? DP suggested that there's a slightly different process going on behind what's causing the different categories of violence. The 'violence' category is a bit more general and includes, for example, certain levels of violence that you might get within town centres on a Friday night, which would probably explain why people typically see more in December; Christmas period, New Year's Eve, New Year's Day, when you do see an increase in that kind of activity.
- It was asked whether the analysis has identified locations or clusters that were not expected, and whether this was going to inform policing activity. Questions were also asked about the fact knife crime is a relatively rare crime and whether this hinders a model's predictive value. DP added that it does make it more challenging, hence the approach is slightly different than the general violence model, which includes a straight time series. In terms of whether insights were useful, an ongoing analysis is required and updated data to see if useful trends are identified over time or repeated



trends suggesting more stable patterns, which in turn may inform policing practice.

5c - Mental health demand investigation

DP delivered a presentation and the following points were noted:

- Overall aims of the project were to essentially explore if there are any seasonal patterns and factors that seem to correlate with mental health related demand on police services in the West Midlands, i.e. police called out on what ends up being a mental health crisis event (MH incidents). Ultimately, this was out of a recognition that mental health challenges have a huge impact on policing demand and yet there is a gap in data analysis around the problem profile.
- The model looks to assess presence of high demand locations.
- Predict location (at ward level) and number of MH incidents.
- Demand for WMP resources occurs throughout the force area and in considerable numbers, thus the rationale.
- MH incidents are not always flagged as being such in the relevant police record systems, and is less so in the last few years.
- Because of issues with changes in data entry, MH incidents are taken from the Command and Control systems (i.e. the systems used when taking information from calls from members of the public) and followed through into the other systems.
- There are a number of different types of MH service providers in the WMP area.
- DP outlined some of the initial insights. MH incidents often occur within 1 – 1.5 km of an MH service provider.
- Most MH incidents are amongst white individuals, particularly in the 26 – 39 age group which are fairly evenly spread between males and females.
- There is considerable new data available to WMP and this should be considered once there is sufficient quantities to use effectively.
- Approximately a third of mental health incidents are not flagged as such directly.
- Wards with high levels of demand tend to remain high.
- Predictions suggest a number of wards with higher demand.
- The number of Mental Health Service Providers in a ward is an important factor.
- Levels of violent crime and theft are important variables and to a lesser extent, drugs and harassment incidents and crimes generally.
- The number of Mental Health Act classifications at a number of Custody Recording stations.
- There is clustering in certain wards with a neighbourhood impact.
- A combination of a spatially informed model and a simple time series model predict aspects of mental health demand.
- Information from partners will likely aid understanding.
- We are living in extraordinary times currently and the relationships between different variables and data points might not remain stable.

The Committee had the following questions and comments:



- The Committee queried how well these models work and how they compare to existing processes, and that while the objectives are very clear it's less obvious how they've shown new insights.
- The Committee suggested that the free text terms used for the analysis (i.e. the extraction of free text from police systems) are very general and vague, so it's quite difficult to therefore get a sense of where the mental health issues are arising.
- Members also asked how well will it work compared to current problem analysis practice? DP said that in terms of mental health demand analysis, current practice essentially doesn't exist so overall at the moment it is a dashboard that is available, to mental health triage to be able to ascertain how many have occurred. There's probably some spatial element to that in terms of just a map, but there's nothing in terms of hotspot analysis, or predictions. In terms of performance on what's going on, there isn't anything in the way of predictions for any of these trends and issues. The model does perform slightly better than using the hotspot methodology for knife crime, but for mental health there isn't anything at the moment to compare against in terms of current practice.
- It was asked about whether any analysis had been done on whether certain incidents had wrongly been classified as MH incidents due to racial biases, e.g. certain officers being more likely to interpret a person of minority background as having a mental health problem? DP said there might be scope for a sub project or for an activity, where subject matter experts meet with the people who write the free text content and try to come up with something a little bit more refined, that would help to form more sophisticated analyses and profiles of MH incidents.
- The Committee asked, it stands to reason that more white males are involved in mental health incidents due to the majority demographically, how do the racial ratios differ if figures were reported by proportionality to the percentage of demographics? DP said that they probably would show difference. The current analysis is more about general figures on levels of MH incidents.
- It was questioned about the number of mental health service providers and the fact this was explored as an important factor. Was this variable something that came out of the analysis or was it explored as a hypothesis? KS said it was looking to test a hypothesis that provider location might be correlated to MH incidents in some way.. In any event, it is acknowledged more work is needed to improve WMP data accuracy regarding MH incidents but also working more closely with health providers to improve the sophistication of this analysis.
- The Committee asked: have conversations begun with partners around this analysis, and has it spurred any helpful dialogue or policy? Has it influenced our own internal analysis? Does it show us anything new or of interest? Are there plans to take these conversations further to have some updates on that? KS noted that the analysis has been shown briefly with the providers and officers as preliminary discussion on the findings and there is further engagement with subject matter experts in how to evolve



this analysis and its implications. In terms of new insights, the findings confirmed the high incident areas look like the ones that have always traditionally expected to produce higher levels of MH incidents. There has been no sharing of the data analysed so far with the NHS as awaiting the discussion with the Ethics Committee to suggest that would be a way forward. Mental health information is needed from the mental health providers to really allow focus on our resources for those who really do need it. Unable to comment on the quality of data as it's not been seen, but is an ongoing discussion that will have to be had probably over the next six months to a year.

5d - Response crewing mix (addendum)

DP delivered a presentation and the following points were noted:

- Response crews are tasked with handling the majority of calls to service from the general public, in particular those that are emergency contacts in which an immediate risk of danger to life or property is present.
- The force has a limited ability to vary the number of officers and fleet available to the response department, within those constraints we aim to balance response time, and crime clear up against officer welfare and the mix of demand.
- It is clear that increasing the number of crews would improve response time, which could potentially be enabled through single crewing.
- However, there is ample evidence indicating that an increase in the number of double crews has a positive impact on officer welfare regarding mental wellbeing and risk of injury.
- This model therefore involves building a simulation to ask lots of questions/scenarios
- If we went from 20% double crews through to 75% double crews for example, the response times would have a large variance and the average response time will likely go up.
- The analysis looked for the 'best' ratio of double crews.
- The model looked at potential costs variance between alternatives (cars, officer costs, potential injuries, crimes and potential down time) .
- Within the WMP area recorded crime has been slowly rising over the past 5 years, and since coronavirus outbreak in 2020, there has been a sharp reduction, though this is most likely transient. A reduction of 10% in demand could be met by a reduction in fleet while maintaining the same crew mix.

The Committee had the following questions and comments:

- Last time this proposal was brought to the committee one of the key questions was, are any options being looked at as part of this analysis, which could result in a change of practice or WMP action that put officers at greater risk, and the answer then was 'no'. The Committee this asked: What things are being explored here in this updated analysis, which could result in an action where officers are at increased risk? Is the Police Federation part of conversations around the results of this if it was concluded that the ideal crewing mix resulted in a net increase in risk to



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| | <p>officers, but that economically this worked out favourably? And are you comfortable these analyses have properly factored into the cost-benefit analysis the true costs of personal injury or damage to officer wellbeing, including the loss of quality of life? DP said the costs-benefit analysis has not yet been undertaken and wanted to bring it to the Committee first on the basis that it's an intention based on what they've seen before resulting from other similar simulation analyses.</p> <ul style="list-style-type: none">- If in due course, this analysis resulted in an increased risk appetite, then that could give rise to quite big ethical questions. It's subjective about where the appropriate trade-offs should be made and policing safety and effectiveness, but if that is where this analysis ends up then that's where the ethics issues become really live. DP said that they will probably look to try and advise people to steer clear unnecessarily of crewing combinations that suggest increasing risks and using this to inform a sort of cost benefit analysis involving more single crews.- It was noted that the Home Office and other similar bodies have done quite a few cost of crime analyses, which really go into quite a lot more detail around the psychological impact of physical harm and the long term loss of quality of life which could definitely be translated into this analysis. The most recent one is from 2018 by Heeks et al, and it gives a lot of detail which would be an appropriate starting place for analysis - it was noted that it might shock you the value they put on loss of quality of life, but it's astronomical and could completely shift your analysis. DP added that they could certainly look in to this, and in terms of using data regarding hospitalisations, they could potentially look at health records of officers, but ended up not doing that and using aggregate information because the Committee was expressing concerns about looking at the medical records previously on privacy and ethics grounds. |
| 6 | Coffee Break |
| 7 | <p>Committee Advice</p> <p><i>Long-term forecasting of violent crime and knife crime – proposal</i></p> <p>The Committee pulled these two proposals together as they were very similar.</p> <p>The Committee unanimously voted in favour of option 'C' under the Terms of Reference, meaning "It advises approving the project with major amendments".</p> <p>Recommendations from the Committee is that there needs to be a lot more work done to actually clarify the extent of deployment of these tools. Some clarity over interventions is a really important consideration, i.e. how strongly will the analyses be relied upon and what interventions will follow, because over reliance on the data or overly coercive interventions (e.g. increased stop & search activity) as a result of such over-reliance could potentially give rise to ethical issues.</p> <p><i>Analysis of school catchment areas and violence – proposal</i></p> |



The Committee unanimously voted in favour of option 'E' under the Terms of Reference, meaning "It requests more information from the Lab in order to be able to advise".

The Committee recognised the positive intentions of identifying schools and areas where supportive and public health interventions might be deployed. However, the Committee also suggests that the proposal raises some very significant issues about the handling of this type of data around schools and categorisation of schools and the profiling of children (with associated risks of stigmatising and labelling children, areas, schools or neighbourhoods). Concerns were also raised around the language in the paper, describing children as violent offenders; advising a different use of language to be used.

Violent crime predictions (4 weeks)

The Committee unanimously voted in favour of option 'C' under the Terms of Reference, meaning "It advises approving the project with major amendments".

Knife crime predictions (4 weeks)

The Committee unanimously voted in favour of option 'C' under the Terms of Reference, meaning "It advises approving the project with major amendments".

For both violent and knife crime predictions over 4 weeks, the Committee recognised that identifying certain areas where violent crime is more prevalent could have important implications for resource allocation or prevention strategies. However, the Committee advised that further clarity is required over exactly how these analyses are going to be conducted in order to be able to provide any kind of reliable predictive outputs, and that again further detail was required around the degree of reliance on this data and the corresponding policing activity. The concern over the latter is again to address concerns of over-reliance or undue belief in its accuracy and potentially unwarranted coercive interventions.

Mental health demand investigation

The Committee was impressed with the ambitions of the project and the initiative being taken by WMP to better understand its mental health demand, and felt there were huge potential advantages to this analysis going forward.

The Committee unanimously voted in favour of option 'C' under the Terms of Reference, meaning "It advises approving the project with major amendments".

In particular, the Committee felt more detail was required around how policing data was assessed for containing references to MH incidents, and more detail was required for how greater nuance and granularity would be identified in existing data, partner data and plans going forward as this work evolves.

Response crewing mix (addendum)

The Committee unanimously voted in favour of option 'C' under the Terms of Reference, meaning "It advises approving the project with major amendments".



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| | <p>The Committee raised concerns about the way the cost benefit analysis might be conducted, and advises care is taken over how this analysis could impact on proposing options that unduly place officers at greater risk than under current practice.</p> |
| 8 | <p>Initial presentation of results from the self-assessment survey</p> <p>No time in meeting to present the results so RH will circulate the slides to give a summary on feedback. There will however be a meaningful session in due course to consider the feedback.</p> |
| 9 | <p>NDAS Update</p> <p><i>Organised Exploitation</i></p> <p>ND delivered a presentation and the following points were noted:</p> <ul style="list-style-type: none">- This was an elaboration on a presentation given previously where the organised exploitation model was and still is being scoped in principle, with the objective of identifying connections between organised offenders using police data through an automated model.- After the previous Committee meeting, it was noted that the Committee saw significant advantages in using a model of this kind, but felt more detail around how individuals are being 'linked', with specific examples, were required to feel assured false positives would not result in ethical problems.- The project team agree that the demo meeting was beneficial for Modern Slavery and would welcome the opportunity to demonstrate the model for this project.- The project has been through multiple engagements within other Forums on this and all feedback received was very positive including from mentors who deal directly with victims of exploitation and this was valuable feedback that fed the improvements to the business rules. Three main changes to the business rules have been made. Changes to the Victim/Perpetrator scale rule changes (i.e. business rules that identify where people are on the victim-perpetrator scale). The victim/perpetrator scale change, previously had a scale from -5 to +5, we changed this to -16 to +16. Also changes to the Involvement rules, which was changed to a simple count of the number of organised exploitation events a person has been linked to, which makes it more understandable to the user. The difference in performance of the model from an accuracy perspective with all of those changes is very significant. It was also pointed out that in the sample set, out of the victims falsely identified as offenders (only 8%), none of them had a score of +5. This meant that the likelihood of overly criminalising these victims was minimalised, as intrusive police tactics will naturally be used for perpetrators higher up the scale. This demonstrates the power of widening this scale from -5 to +5 to -16 to +16. <p><u><i>The Committee made the following questions and comments:</i></u></p> |



- The offer of a demonstration for the Organised Exploitation project would be very welcomed by the Committee.
- Really positive to see in the paper, the comments about the handling of the outputs as intelligence etc. in the previous scale, and also in the model, i.e. a recognition of this being highly sensitive and the creation of new sensitive data that needs to be handled with care and legal compliance.
- It was asked if somebody is classified by the model in a particular way, whether there are human checks that would happen at that point before that output would be entered in any other system or acted upon. This would be to ensure that the victim that's been identified as perpetrator would be picked up at that point, or before, and if so, is there more information about those processes that could be laid out? ND added that before any actions as a result of these models, there will be a human in the loop. In terms of perpetrators, once verified by an officer, the action would become part of the tasking processes that exist in force. Similarly regarding the Organised Crime Exploitation hub, there would be an identification of priority networks, and then the tasking activity would aim to tackle the threat that exists within the network and safeguard those who are at risk and target those who present a threat. In summary, there's a force tasking process, which identifies networks and prioritises them, and essentially disseminates that to the relevant place for police and partner intervention.
- From the previous paper, a lot of progress has been made in actually documenting much more detail about how the model has been constructed and the false positives, false negatives result rates, because the previous paper really didn't have that much in this tool in terms of detail. So that's a very positive step, and transparent.

A view was expressed that there's far too many variables that are not being properly considered in this model, and that they're (i.e. the police) essentially going down the legal route (i.e. not the full contextual picture behind something this complex) or making simplistic judgments based on whether someone is under 18. They're deciding that if someone is not a child they are too willingly classifying someone as a perpetrator, but completely neglecting the fact that they may often have been a victim of abuse and that might not have been picked up under the current model. ND commented that the project has assessed a broad range of variables across a number of source systems, guided by Police subject matter experts. The numerical representation for involvement in organised exploitation, and Victim/Perpetrator scale is to guide end users in understanding large volumes of data. The scale takes into consideration the many variables associated to a person, and their respective events. In the initial rules, age was a guiding factor, however the second iteration does not use the same logic, paying less attention to a nominals age in light of older individuals also being at risk.
- ND also stated that the engagement was had with two mentors who deal directly with young people had led to changes to the rules to encompass



more young adults for exactly this reason. This was done to the satisfaction of these subject matter experts.

- It was suggested that the organisations below tend to focus on sexual exploitation but given the overlaps and their understanding of victims experiences they could offer some useful insight.

CSA Centre - <http://www.csacentre.org.uk/>

NWG Network - <https://www.nwgnetwork.org/>

There are several academics/independent researchers that operate in the area of organised exploitation and it could be beneficial to engage with an SME that specialises in victim-centred research (Dr Jessica Taylor, for example). [This last comment was raised after ND left the meeting].

Violent Crime

ND delivered a presentation and the following points were noted:

- This project is in development with no developed dashboard to share at the moment.
- It would seek to support the tackling of violent crime at different levels such as, Serious Violence Policy, Violence Reduction Unit, Home Office surge funding for violent crime and local interventions.
- The idea is to understand violent crime through these different typologies such as knife crime, gun crime, Youth Crime, OCG, Domestic Violence & Robbery.
- Have been engaging widely with home office colleagues, academic institutions, different forces, Violence Reduction Units to ensure the model fits the requirements of as many different customers as possible. Also with the WMP data lab as well to make sure that we're complementing each other rather than developing things in the same space.

The Committee made the following questions and comments:

- It was added that more detail is needed about these proposals for individuals to be able to be informed about decisions made in a way that are shaped by the model (this had been picked up on through the written paper sections in the ALGO-CARE structuring, under 'Lawfulness' and 'Challenge'.) *This comment was raised after ND left the meeting.*
- It was mentioned that in the written paper this use case has an individual level analysis component and there is an explanation about the notification process that would enable an individual to challenge their risk profiles. The Committee raised the point that they were aware the model wasn't predictive, but that if the use case is making assessments of an individual, it could potentially be used like a scoring tool. And secondly, if an individual wants to challenge, what would the process for this look like? ND added that this process is in development and the need to make sure that the public are aware that this is use case development is happening. There already exists processes for people to seek information of the data held on them and we will look to be a part of that process, as opposed to a new process.



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| 10 | Committee Advice and Comments on NDAS <i>Organised Exploitation</i> The Committee unanimously voted in favour of option 'C' under the Terms of Reference, meaning "It advises approving the project with major amendments". The Committee notes this is an important model with an important agenda, but is also potentially high risk if it were to wrongly associate victims or otherwise non-perpetrators as being perpetrators. Recognising significant steps are being taken to prevent this risk, the advice is for the project to proceed based on what we know but pending further details in the fuller briefing. The suggested major amendment is, in terms of the project proposal papers, a substantive 'addition' in the form of more qualitative narrative outlining illustrative case studies demonstrating how decisions are made on the victim/perpetrator thresholds – this would help bring this vital component to life more, in contrast to the more abstract technical descriptions. <i>Violent Crime</i> The Committee was not asked to advise on this proposal at this stage as it was just a presentation for information. However, the Committee expressed a desire to learn about the details of proposals as they emerge as soon as possible, given the risks identified with previous attempts at predicting youth crime. |
| 11 | Meeting Close |