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Strengthening the evidence base for effective pursuit management and decision-making for police officers and staff managing public safety and policing of the roads.

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On behalf of the Metropolitan Police Service (MPS)

Funded by the Road Safety Trust

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Contents

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Glossary

Initial phase trained drivers/motorcyclists	Police drivers trained in the initial phase. Must follow the initial authorisation procedure and request tactical phase trained advanced drivers to assist and provide information and risk assessment regarding the circumstances of the pursuit so that control staff can assign appropriate resources.
Tactical pursuit and containment (TPAC) phase trained advanced drivers	Advanced drivers responsible for dynamic risk assessment and accurately communicating this to control room staff. They are responsible for seeking tactical engagement.
Operator	In double crewed pursuit vehicles the radio operator delivers the risk commentary to control room staff. This will include any decisions and actions that should be included in the commentary and be recorded with control/communications room voice-recording facilities.
Tactics and Containment Advisor (TAC)	Trained and experienced in tactical operations and advises on range of tactical options available. In spontaneous pursuits they advise the pursuit commander and/or control room staff and provide operational support to police in the pursuits by monitoring their risk commentary.
Control/communications room supervisor	Has overall control of the pursuit, constantly risk assesses and ensures that tactical trained advanced drivers are assigned and identifies a pursuit commander. The control room supervisor has ultimate responsibility for decisions to authorise/discontinue pursuits and to seek tactical strategies for pursuits.
Pursuit commander	An officer within one of the pursuing tactical phase vehicles, responsible for executing tactics and maintaining communication during the management of a pursuit.
Control/communications room staff	Responsible for coordinating radio communications during the pursuit and informing the control room supervisor of the start of a pursuit approving initial and continued authorisation for pursuit and constantly risk assessing activity, based on information and intelligence received. They are responsible for assigning resources at the tactical phase.
Metropolitan Police Service (MPS)	The police force responsible for London
Office for Police Conduct (OPC)	An independent organisation that receives complaints against the police and investigates them
National Police Chef Council (NPCC)	Brings all UK police forces UK together to help coordinate operations, reform, improve and provide value for money.
National Decision Model (NDM)	A framework police that covers the ethics around all police operational decision making to assure public confidence
Powered two wheelers	Motorcycles, mopeds or scooters
College of Policing (CoP)	Established in 2012 as the professional body for everyone who works for the police service in England and Wales. The purpose of the College is to provide those working in policing with the skills and knowledge necessary to prevent crime, protect the public, and secure public trust.

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Executive summary

Strengthening the evidence base for effective pursuit management and decision-making for police officers and staff managing public safety and policing of the roads.

Police pursuits, by their nature, are one of the most inherently dangerous activities that police drivers will undertake as part of their role. In recent years, statistics for England and Wales show that pursuits remain the highest cause of civilian fatalities following police related road traffic collisions. The literature shows that most pursuits occur in response to relatively minor offences and do not warrant undertaking a high-risk pursuit recommending more restrictive policies with strict operating procedures focusing on pre-emptive tactics. Moreover pursuits should only be undertaken in response to serious crimes.

In England and Wales all police work, including pursuits, falls under the National Decision Model (NDM) which supports decision making by providing a framework in which 'decisions can be examined and challenged, both at the time and afterwards'. At the centre of the model is a code of ethics, which officers and staff have to act in accordance with. The NDM recognises that in operational work police and staff have to make decisions in which have to consider the balance of risk in often difficult and fast moving situations. Police and staff are encouraged to use their discretion where appropriate as long as they can justify their decisions using the NDM. In 2013, the College of Policing published the Authorised Professional Practice guidance for police pursuits.

Little research has been conducted around pursuits where the outcome did not involve a fatality or where the focus centres on decisions surrounding risk and risk assessment specifically. The aim of this study was to strengthen the evidence base for effective pursuit management and decision making for police officers and staff managing public safety and policing of the roads. The research will be used to support training of police drivers and control room managers in the management of risk to ensure that consistent risk-based decisions are made.

This was a mixed methods case study based on the Metropolitan Police Service (MPS). The study involved an analysis of pursuit data (2016-2019) and 30 in-depth qualitative interviews among drivers, control staff, tactical advisors and strategic stakeholders to explore factors which generate pursuits and influence their subsequent safety. The range of participants represented the team involved in pursuit management and stakeholders that had an interest in the policy and practice of pursuits. Broadly speaking, the current practice in the MPS is that pursuits are managed between the driver with their radio operator in the pursuit car and a remote control room supervisor with support and from pursuit tactics and containment advisor (TAC).

It should be noted that these findings relate only to the MPS which is one of 43 forces in England and Wales.

Key Findings

The effectiveness of pursuits

Most pursuits that occurred did not end up with a successful outcome in terms of apprehending the subject with most being discontinued or the subject being lost.

Injury rates

The injury risk to the public per 100 pursuits has fallen year on year and is much lower than the national average. For example, in 2018 the MPS injury rate was three times lower for police and nearly two times lower for subjects compared to national data estimates. However, it is hard to know whether this is related to a more restrictive pursuit policy or how pursuit management is configured. For example, the MPS control room supervisor seemed to take a greater role in decisions to terminate pursuits compared with the national data.

Motorcycle pursuits appear greater in London and have grown as a proportion of pursuits (over the last three years). This may reflect the nature of crime in the area or policies regarding crime prevention.

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Risks assessment and triggers for pursuits

Most drivers identified the risks they took into account in their decision making of whether or not to pursue. However, many drivers acknowledged that pursuits were often spontaneous and triggered on a hunch. In these circumstances, seeking evidence to corroborate such suspicions proved problematic. This type of pursuit was often caused by the driver/rider failing to stop on request and leading to an offence of failing to stop. Whilst MPS pursuit data showed that the largest single category reason for a pursuit was for criminal activity (40% on average) over a quarter of all pursuits were as a result of 'fail to stop'. Control room staff felt that getting information from the drivers was important to 'fathom out' the reason why the police wanted to stop the drivers in the first place. They needed as much information as possible from the driver/operator, but this was not always forthcoming. There was also a feeling that drivers reacted too quickly, without considering pre-emptive tactics or requesting further information and this generated many unnecessary pursuits. There was also a tension within the control room where pursuit tactics and containment advisors were more likely to feel that a pursuit should be authorised on the grounds of 'fail to stop' whereas other staff were much more circumspect.

The authorisation process

Police officers can authorise the pursuit themselves but need to justify it later (in line with the NDM). When authorisation was requested, it was felt that the process was hampered by poor sound on the radio channel which often led to decisions to terminate the pursuit because it was difficult to understand the risk assessment from drivers. The MPS pursuit data showed that 5% of pursuits were terminated because communications were poor. There was some tension between drivers and the control room, described by drivers as a 'disconnect', leading to difficulties in conveying risks and seeking authorisation. Some drivers and TAC advisors felt that staff in the control room were not experienced pursuit drivers which limited their understanding of making the right decision about the risk level. It was also felt that control room staff were risk averse, lacked courage and could not see the 'wider picture'. However, some drivers felt that the 'remoteness' and 'objectivity' of people in the control room was required to ensure the safety of pursuits.

The TAC advisors also felt control room staff put excessive pressure on the drivers/operators. Control room staff preferred pre-emptive tactics and would not authorise a pursuit or terminate it if they felt the justification by the driver was unacceptable. They felt this protected the drivers from themselves, especially at a time when the driver's judgement may be clouded by the incident or intensity of it and any adverse consequences of being involved in a pursuit. The TAC advisors were perceived by control staff as a useful addition to the control room to help support decisions. TAC advisors had mixed views about whether a pursuit was a proportionate response with several of the TAC advisors feeling that drivers were too quick to pursue and not enough was done to get the required intelligence in order to look at pre-emptive tactics to avoid a pursuit in the first place whereas others felt the driver should be trusted. The MPS pursuit data shows that just under a quarter of all pursuits were discontinued and in 77% of cases they were terminated by the control supervisor.

The importance of an experienced operator

Drivers and control room staff felt it was essential to have an operator who was also was an experienced driver who understood the risks and who could provide an accurate commentary to the control room. They were regarded as a weak link in the pursuit. It was felt that more training was required for operators to help them provide a clear risk commentary and this could be done by having to listen to live recordings of pursuits. The MPS pursuit database showed that over a quarter of pursuits were terminated because of the poor quality risk commentary.

The National Decision Model (NDM)

The NDM was viewed by most participants as something that was engrained in their operational practices and worked almost at a subconscious level to shape their decision-making. It was felt to have a deterrent effect on undertaking pursuits and useful post incident to provide a standardised way of assessing risks but not helpful once a pursuit was underway in dynamic or fast-moving situations. Stakeholder's felt that that the NDM was not well

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understood by the 'rank and file' of the operational police officers and more training was needed on how to use the NDM to pre-empt pursuits.

Driver training

Driver training was felt to be minimal with the consequence that police struggled to keep up with policy changes with too much reliance on people reading emails and e-learning which did little to test its practical application. It was noted that there was no standardisation of advanced training. It was felt that the safety of pursuits could be enhanced by in a number of ways including driver skills refresher courses, operator training on risk commentaries, team meetings to understand respective roles, increasing the number of TPAC drivers (trained in tactical pursuits) and more training on the NDM

Social, emotional and motivational factors which affect risk

Drivers felt their decision making about risks and could be affected by red mist or a fixation on stopping the pursued. The role of the operator was also seen as important to 're-set' the driver when they appeared fixated. Other motivational factors that affected a driver's fixation were talked about in terms of bravado and not wanting to lose face by losing the pursuit and letting the team down. Personal repercussions (especially no legal protection) of an adverse outcome of a pursuit were 'top of mind' for most participants. This clearly led many drivers and control room staff to be more risk averse and this became part of the decision-making on whether a pursuit was a proportionate response. There was also a strong motivation for police to be able to pursue because it was seen as a central plank of policing. It was felt that if they did not pursue this would undermine the rule of law and public confidence.

Two wheeled Crime

Participants felt it was felt important to pursue mopeds and motorcycles as the crimes they committed particularly affected public confidence in the police even though such pursuits were fraught in terms of risk. The MPS pursuit data showed that over a third of their pursuits had involved powered two-wheelers.

Air support

The helicopter was highly valued as it took pressure off the drivers by giving 'a forward view of prevailing conditions and risks. The MPS pursuit data showed that the helicopter was only mobilised in 17% of the pursuits.

Learning from pursuits

Participants felt that they there was minimal learning from pursuits which they felt needed to change. It was also suggested that more could be done to learn from other countries on the problems they faced and how they addressed them.

Public awareness

Participants felt that the safety of pursuits affected public confidence in their work and was not helped by the media did who seemed to vilify the police when things went wrong. However, the public were also seen as a resource who could provide real time information which can then be considered in their decision-making.

The role of technology to pre-empt pursuits

Participants felt more should be done to improve pre-emptive strategies and work with technology that can remotely bring vehicles to a halt or enable tracking.

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Key Recommendations

Data

- The MPS pursuit data is a good monitoring tool but needs streamlining and clearer explanations of the reasons why pursuits occur in the first place especially regarding 'fail to stop' pursuits.
- The high number of self-authorised pursuits recorded in the MPS data compared to national data needs more exploration to understand the reasons why police do not seek authorisation.
- More needs to be understood about why few pursuits end in a successful outcome.

Strategy

- Few pursuits end in apprehending the suspect, therefore the focus should be on pre-emptive strategies which reduce the spontaneous occurrence of pursuits. This could be done by increasing the availability of TPAC drivers, more training on the NDM and by encouraging drivers and operators to think more about pre-emptive tactics.

Training

- Team training days should be regularly organised to understand respective roles and responsibilities and to share data and insights on pursuits.
- The current training for operators to provide clear and accurate risk commentaries should be reviewed to assess its effectiveness.
- Refresher training for drivers should be in line with the refresher training for other operations which can involve lethal force such as firearms.
- There should be continual learning from other countries which have similar problems to understand how they have addressed them to improve police pursuit policy

Technology

- The poor quality of radio communications need to be addressed as this could affect decision making on pursuit authorisation and termination.
- Technologies that track or immobilise a vehicle and curtail a pursuit need to be more widely available.

Awareness campaigns

- A public awareness campaign could be run to raise awareness of the 'failure to stop' offence.

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1. Background

Police pursuits, by their nature, are one of the most inherently dangerous activities police drivers will undertake as part of their role. In recent years, statistics for England and Wales show that pursuits remain the highest cause of civilian fatalities following police-related road traffic incidents (IOPC).

All police work, including pursuits, falls under the National Decision Model (NDM) https://www.app.college.police.uk/app-content/national-decision-model/. The NDM supports decision making by providing a framework in which 'decisions can be examined and challenged, both at the time and afterwards'. At the centre of the model is a code of ethics, which officers and staff have to act in accordance with. The NDM recognises that in operational work police and staff have to make decisions and consider the balance of risk in often difficult and fast moving situations. Police and staff are encouraged to use their discretion where appropriate as long as they can justify their decisions using the NDM.

Much work has been undertaken by the National Police Chiefs' Council (NPCC), College of Policing (CoP) and various Police Services within the UK to improve the training, policies and procedures around driver training and management of pursuits. This work has predominantly focused on the initial driver training, ongoing skills assessment, application of tactics and the tactical advisor's role.

Although risk assessment and the National Decision Model (NDM) forms part of this training, little research has been conducted to identify what police officers, control room staff or the pursued drivers construe as acceptable risk when engaged in pursuits or how the NDM is practically applied in such cases. Within London there has been a relatively sudden and exponential rise in pursuit numbers which has implications for road safety.

Since the late 1990's there have been various publications and reports within the UK concerning police driving. The Association of Chief Police Officers (ACPO) published a report concerning Police Driver Training (Lind,1998) and various studies were conducted assessing fatal pursuits between 1998 and 2003, (Best, 2002; Best and Eves, 2004a, 2004b). Within the UK, the most recent literature appears to be a study of Police Road Traffic Incidents: A study of Cases Involving Serious and Fatal Injuries published by the Independent Police Complaints Commission (IPCC) (Docking *et al*, 2007). This study considered all types of police driving and in respect of police pursuits looked at the circumstances of the pursuit, participant profiles, vehicles and overall pursuit management. There is little research available involving pursuits that did not result in a serious or fatal collision.

Since 2013, the College of Policing has published the Authorised Professional Practice guidance for Police pursuits. This guidance has been adopted by Chief Officers of Police and within the MPS has shaped pursuit training and policy. The NPCC Pursuit Working Group captures examples of best practice and disseminates this throughout the Police Services of England and Wales. The available literature emphasises the need to consider alternative options to prevent the necessity for a pursuit, and guidance around conduct and tactics should officers engage in such activity. It is accepted that risk assessment is very much subjective and varies greatly between individuals. What appears to be lacking currently is research to establish what influences decisions around risk and whether to authorise, continue to authorise or terminate pursuits.

Figures published by the IPCC show that within England and Wales civilian fatalities relating to pursuits has fluctuated over the 10-year period up to the 2013/14 financial year ranging from the lowest of 10 in 2013/14 to the highest of 32 in 2005/06. Beyond the statistics, such fatalities have a devastating effect on all involved, irrespective of individual roles.

There appears to be little research conducted around pursuits where the outcome did not involve a fatality or where the focus centres on decisions surrounding risk and risk assessment specifically. This is an area which is fundamental when considering the activity. Such research will assist Police Services to understand and develop training and awareness regarding risk.

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Understanding the factors which contribute towards pursuits and their sudden rise in London will assist decision makers to develop appropriate plans to deal with them effectively while being mindful of public safety. The findings are likely to be beneficial to other Police Services throughout England and Wales with the potential to improve road safety on this wider scale.

Project aims and objectives

The aim of this study was to strengthen the evidence base for effective pursuit management and decision making for police officers and staff managing public safety and policing of the roads. This project will be used to support training of police drivers and Control Room managers in the management of risk to ensure that consistent risk-based decisions are made in the authorisation and termination of pursuits. To achieve the aims, the project objectives were to:

1. Describe current pursuit management and policy related to MPS
2. Carry out a review of the published evidence on risks in pursuits and how to manage them
3. Analyse metropolitan police data on pursuits to identify injury risk and factors associated with managing the risk of pursuits and compare findings with the national pursuit data.
4. Carry out qualitative research among police and stakeholders who have a role in managing operational risks involved in pursuits to explore factors which may increase or decrease the risks of pursuits.

It should be noted that these findings relate only to the MPS which is one of 43 forces in England and Wales.

1.1 Methodology

The project comprised document review related to current pursuit management and policy, and a review of existing research and studies on pursuits and risk management within the police environment. In addition, the MPS's own data on pursuits was examined and compared with national data and qualitative interviews were carried out with a range of staff that have a role in the decision-making and risk management of pursuits. Interviews were conducted with:

1. Police drivers and operators with varying levels of driver training and policing experience.
2. Operational control room staff with varying levels of experience within the role.
3. Officers trained and performing the role of pursuit tactical advisors.
4. Strategic stakeholders with an interest in professional standards police work including pursuits.

Topic guides showing the question areas are shown in Appendix A. Broadly speaking the questions covered risk management of pursuits, availability of pre-emptive tactics, interaction between the various actors involved, confidence, experience and ability and the role of training. The topic guides were developed collaboratively between UCL and MPS. The research project was approved by UCL's Research Ethics Committee and no personal data about the participants is included in this report.

The police provided a list of potential participants who worked for the police all of whom had a role in pursuit management either as a driver, operator or being based in the control room. To recruit MPS participants an advert was put out across the MPS by the project officer. A list of stakeholders was also provided by the police all of which had an interest in the policy and practice of pursuits. Participants were then contacted by the fieldwork company to arrange an interview. This was done using an informed consent process approved by the UCL Research Ethics Committee. All interviews were audio recorded and transcribed.

The interview transcripts were thematically analysed to explore both *deductively* i.e. to test theories that we have about the nature of pursuits e.g. are they based on thorough risk assessments as given by the National Decision Model, and *inductively* i.e. to see if new theories about the nature of pursuits emerge from the data e.g. is the crew dynamic an issue in risk assessment and the initiation, termination or successful completion of a pursuit? Or how much is 'coppers hunch' driving 'fail to stop' pursuits? Interviews were conducted with four different types of participants: drivers,

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operators, control room staff, tactical advisors and stakeholders (Pursuit Strategic Group: Driving School, Police Federation, Pursuit Strategic Group: NPAS (Air Support), Directorate of Professional Standards, Independent Office for Police Conduct and an Assistant Chief Constable).

All transcripts were anonymised and had a unique identifier which was used with their role label when verbatim quotes (essentially the data) are used to illustrate points.

Whilst we had targets to interview around 12 of each type of participant, in practice this was not possible because of the number who came forward or who were available within the timescale. We interviewed 30 people: 12 drivers (of which five were advanced trained and seven were initial phase trained), five tactical advisors, seven control staff and six stakeholders. However, it is generally agreed that around 6-12 interviews are appropriate and often as few as six will provide enough data to identify meta themes in qualitative data (Guest et al 2006). Where possible, a range of quotes have been used to illustrate the main ideas that have emerged from this research.

1.2 Current pursuit management and policy related to MPS

Authorised Professional Practice was developed by the College of Policing to provide continued professional development in crime prevention and public safety in pursuits **https://www.app.college.police.uk/app-content/road-policing-2/police-pursuits/#police-pursuits.**

The National Decision Model (NDM) is used by the police to manage situations in a 'reasonable and proportionate way' with a view to prevent pursuits from taking place and making decisions which balance the severity of the offence against potential harm caused by the pursuit.

For spontaneous pursuits, in the initial stage, pursuit trained police may be authorised to continue by the control room but they have no authority to take an active part in tactical resolution. Tyre deflation systems may be used in the initial phase. The tactical phase is undertaken by a trained advanced driver in a suitable vehicle, with a pursuit commander taking responsibility for it in the control room.

Police are required to seek authorisation for a pursuit from control room staff though they can self-authorise if there is a short window for decision-making but this decision has to be justified in line with the NDM at a later time:

"Officers should seek authorisation for their decision to engage in a pursuit from designated control/communications room staff. The time available between recognising the need for action and the deadline for taking action may be too short to acquire the control/communications room authorisation. In such cases officers may self-authorise and justify the decision at a later time in line with the NDM. No additional authority is required to move from the initial phase to the tactical phase. " (APP, National Decision Model 2013)

Police must provide information to control room staff on their driving authority level, the vehicle they are using, a description of the suspect's vehicle and occupants as well as the direction of travel. The dynamic risk assessment provided by the operator is used to indicate risk and proportionality which is considered to review authorisation decisions. Key considerations around pursuits are:

- *the current level of risk posed by the pursued driver*
- *whether or not the suspect's identity is known*
- *the seriousness of any known offence committed or suspected*
- *the weight of intelligence as to whether the suspects are, or are likely to be, armed (see situational engagement of suspects)*
- *whether the driver is, or appears to be, a juvenile or whether it appears that other vulnerable persons are in the vehicle*
- *the type of vehicle being pursued, e.g., car or motorcycle*
- *the current/anticipated route in respect of the time of day, road, weather, traffic, specific considerations such as schools, licensed premises or off-road terrain*
- *the availability of tactical options*

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- *Drivers must possess a sound knowledge of the considerations, as many short-duration pursuits may not allow time for specific guidance to be received from control/communications room staff.*
  Source: https://www.app.college.police.uk/app-content/road-policing-2/police-pursuits/#police-pursuits

Tactical options are available and kept confidential by the police. Decisions to discontinue a pursuit can be made by initial or tactical phase drivers or control room staff. According to the APP, all vehicles involved in pursuits should be equipped with a radio system capable of communicating with control/communications room staff and recording real-time evidence. All staff involved in pursuit management are trained to the standards set out by the College of Policing and receive refresher training every two to three years.

1.2.1 Roles and responsibilities of the pursuit team

The roles and responsibilities of the team involved in managing pursuits are described below:

1. **Initial phase trained drivers/motorcyclists** must follow the initial authorisation procedure and request tactical phase trained advanced drivers to assist and provide information and risk assessment regarding the circumstances of the pursuit, so that control staff can assign appropriate resources.
2. **Tactical pursuit and containment (TPAC) phase trained advanced drivers** are responsible for dynamic risk assessment and accurately communicating this to control room staff. They are responsible for seeking tactical engagement.
3. **Pursuit commander** is an officer within one of the pursuing tactical phase vehicles, responsible for executing tactics and maintaining communication during the management of a pursuit.
4. **Control/communications room staff** are responsible for coordinating radio communications during the pursuit and informing the control room supervisor of the start of a pursuit approving initial and continued authorisation for pursuit and constantly risk assessing activity, based on information and intelligence received. They are responsible for assigning resources at the tactical phase.
5. **Control/communications room supervisor** has overall control of the pursuit, constantly risk assesses and ensures that tactical trained advanced drivers are assigned and identifies a pursuit commander. The control room supervisor has ultimate responsibility for decisions to authorise/discontinue pursuits and to seek tactical strategies for pursuits
6. **Pursuit tactics and containment advisor (TAC)** is trained and experienced in tactical operations and advises on range of tactical options available. In spontaneous pursuits they advise the pursuit commander and/or control room staff and provide operational support to police in the pursuits by monitoring their risk commentary.
7. **Communications** in double crewed pursuit vehicles the radio operator (or operator in this study) delivers the information to control room staff by verbal commentary (risk commentary) and will include any decisions and actions that should be included in the commentary and be recorded with control/communications room voice-recording facilities.

The drivers are at the 'sharp end' of the pursuit and undergo initial training in which they must demonstrate that they have achieved the following learning outcomes:

1. Maintain a calm rational attitude
2. Demonstrate observation, anticipation and planning for hazards beyond the lead vehicle
3. Correctly interpret information provided by the lead (subject) vehicle
4. Vary following distances in relation to speed and circumstances
5. Continually assess the need to continue a pursuit
6. Demonstrate a safe systematic drive

Initial pursuit training involves a comprehensive three-week course at the Driving School at Hendon and training in real life traffic conditions with expert instructors. They are continually assessed and must reflect on the driving with

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an experience log. Details of tactical advanced driving training is not in the public domain for security reasons. The author of this report spent one day on this course and was impressed by the training of the police especially regarding dynamic risk assessment and how they 'signal' to the public to ensure the safety of pursuits. Importantly, it was also noted that instructors felt that pursuit driving should be seen on par with firearms training and refreshers should be conducted annually, and not every 4-5 years as currently happens. In addition, one instructor commented that they could not see where the next generation of instructors were going to be found.

2 International literature

2.1 Introduction

Pursuits are a risky activity and can lead to damage, injury and deaths of the police themselves, the pursued and other members of the public. When such injuries occur, they also receive a high level of scrutiny by the public, the media, the police and other bodies which monitor police activities. These deaths and injuries can damage public confidence in police work. Enforcement, and the public reassurance it provides, needs to be conducted in a way that does not pose risks to public safety. Ironically, the evidence suggests that pursuits can create situations that are far more dangerous to the public than the original offence. In the UK, the most common penalty for this type of motoring offence is usually dealt with 5-10 penalty points and a fine of up to £5000 – especially if the incident is classed as a Category 1 offence.

Waddington (2010) described police as having a 'hunting instinct' which can easily lead to emotional investment in a pursuit but he argued that a car is a weapon and this needed to be managed and controlled in the same way as the use of firearms is in an armed response. He argued that when travelling in a high-speed pursuit, police are 'virtually goaded' into increasing their speed and thereby pose a significant risk to innocent bystanders, concluding that there needs to be 'the same level of control as policies dealing with armed confrontations'.

Best and Eves (2005) in their in-depth analysis of case studies selected from an analysis of 64 pursuits which led to 71 deaths in the UK between 1998-2001 concluded that police officers did not sufficiently consider the risks to their own safety or that of the general public. They also concluded that 'proportionality' was not considered in responding to pursuits where the suspect had 'failed to stop'. Arguably, this research is quite old now being based on case studies nearly 20 years ago and policy on pursuit has developed since then especially with the introduction of the National Decision Model (https://www.app.college.police.uk/app-content/national-decision-model/the-national-decision-model/) in 2013.

Pursuits occur for a number of reasons but broadly speaking they fall into three categories. Firstly, they occur because police have intelligence that the pursed has committed a serious crime and is a danger to the public. Secondly, they occur because the police detect someone who may have committed a relatively minor offence, but they 'fail to stop' giving rise to a pursuit. Thirdly, the pursuit is pre-planned based on gathered intelligence that a serious crime is about to be committed. Pursuits happen in a context and decisions to pursue or not are influenced by several factors. One of the most important of these is whether it will increase the risk of injuring someone including the police themselves, the pursued or members of the public. Once a pursuit starts police must dynamically assess risks to decide as whether to stop or continue the pursuit. This literature review looks at the evidence on police pursuits to help understand risk factors for crashes in pursuits, the types of offences that give rise to pursuits, the role of technology in reducing the risk associated with pursuits and the role of data in developing evidence-based practice.

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2.2 Risk Factors for crashes in pursuits

The evidence shows that most pursuits occur in response to relatively minor offences and do not warrant undertaking a high-risk pursuit. Hoffmann and Mazerolle (2005) showed that of the 630 pursuits in Queensland, Australia across a five-year period, half were initiated for traffic offences and a quarter were initiated for stolen cars. Of all the pursuits nearly a third involved a collision and around a tenth were injury collisions in which 11 people lost their lives. The authors argued that the nature of the offences did not justify pursuits and that more restrictive policies should be adopted.

Hutson (2009) analysed all police pursuit reported fatalities on the US National Transport Highways Authority National Fatal Accident Reporting System for 1982-2004. Of the nearly one million fatalities related to motor vehicle crashes, 7,430 (0.75%) were secondary to police pursuits with children and adolescents accounting for nearly one-third of all fatalities. Most of the fatalities were in the vehicle being pursued (72%). Police fatalities accounted for 1% with the remainder being uninvolved in the pursuit (27%). Like other findings the fatalities in the pursued vehicle were mainly male, young (average age 24) with ethnic minorities being overrepresented in the sample. Most fatalities in the pursued vehicle involved a collision with a solid object, whilst collisions with other moving vehicles accounted for 80% of fatalities of people in other vehicles who were not involved in the pursuit. Most fatal crashes occurred on urban roads. Hutson et al found that alcohol was involved nearly two thirds of fatalities and worryingly 25% of police fatalities involved alcohol intoxication.

Chu (2016) used 4-years of data (2005–2008) from the road accident database of the National Police Agency in Taiwan. Of 473 crashes involving police cars, 39% were responding to an emergency call or pursuing suspects/offenders and these were used to explore the effect of risk factors for injury crashes. The findings revealed the risk factors for a crash were associated with the police driver being young, excessive speeds during emergency driving or in pursuit, violation of traffic signals and when the pursuit involved motorcyclists. Chu argued that risk assessment and an evaluation of whether it was necessary to apprehend fleeing suspects was essential to prevent putting the public or themselves at risk of a crash. In addition, he argued that strict operating procedures for pursuits should be embedded through training.

Wade (2015) examined factors associated with high-risk police pursuits in the state of Georgia and statistically analysed a sample of 2,155 pursuit reports from 2007 -2009 to identify factors related to positive and negative outcomes of pursuits. Analysis was carried out for pursuits that involved damage/injury/fatalities, and those with no negative outcomes. Pursuits that had negative outcomes were related to 'forcible felonies' (i.e. aggravated criminal activity), stolen vehicles, were drug-related or associated with "other" violations. These pursuits tended to involve speed, occurred at night, and lasted between 9-15 minutes.

2.3 Factors which trigger pursuits

Research regarding police pursuits has revealed that although most pursuits are conducted without incident, many pursuits are initiated for relatively minor offences (largely traffic offences) (Alpert et al., 1996). Similarly, Alpert and Lum (2014) in their comprehensive book on pursuit policy and research identified that most pursuits in the US occurred because the suspects were frightened of getting caught for minor offences and would have slowed down and driven more cautiously if they had felt safe from the police. They cite evidence (Alpert,1997) from Florida that a more restrictive pursuits policy limited to 'serious felons only ' did not lead to an increase in crime rates but led to an 82% decrease in pursuits. However, it is not clear what reduction in pursuit related injuries occurred. Though arguably both the police and others exposure to risk of injury decreased.

Alpert (1998) examined the characteristics of police pursuits in Queensland from 1997 to July 2002 looking at the reasons given by the police, the typical profile of the person being pursued and the consequences of the pursuit. The key characteristics of pursuits were that the average duration was around seven minutes with an average reported maximum speed of 119 km/h (16% were 160 km/h or more); half were 'fail to stop', a quarter involved a stolen

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vehicle, and most were related to minor offences. The pursued were mainly young and male of which up to a third had consumed alcohol. Of these pursuits 11 percent resulted in injury or death – mainly the person being pursued.

Ironically, half of the pursued drivers were charged with offences related to the pursuit followed by unlawful use of a vehicles. Only 6% were charged with relatively serious offences such as 'break and enter' and few related to serious offences such as armed robbery or violence. These findings have led to calls that pursuits should be restricted to more serious offences rather than leaving the decision to pursue or not to the individual police officer.

2.4 Alternative tactics

It is generally agreed in the literature that there is no single technology that can be used as a universal solution to pursuits. Pursuits are fast and dynamic, and it takes time to set up alternative tactics such as tyre deflators (stingers).

A recent evaluation of StarChase (http://www.starchase.com/) (a device designed to tag and track a vehicle) by Gaither et al 2017 https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=272715 has shown that when deployed properly it had a positive impact on the pursuit outcome in terms of apprehensions and was a helpful pursuit management tool, but not a 'comprehensive solution' for resolving all types of pursuit. Arguably it would be difficult to use such a tracker on smaller vehicles such as mopeds and motorcycles. Alpert and Lum (2014) argued that such vehicle tagging has shown that drivers behave as if they are free from the police and slow down when the police stop chasing suggesting that they have no knowledge that they are being tracked. They comment that tyre deflators are used to immobilise the pursued vehicle but can be problematic because they take time to set up and the path of the pursuit needs to be anticipated. An unintentional consequence may be that the offender recognises it and simply avoids the device without running over it and if this means going up onto the pavement which could risk injury to people there and also even if tyres become deflated it does not always mean the pursuit will come to a safe end. Alpert and Lum discuss 'auto-arrestor' systems and remote ignition blocks whereby electrical impulses disable the vehicle's electronic system making the vehicle stop slowly. Again, these systems take time to set up. They concluded that one of the most important management factors is to not to invest in training and teaching officers how to pursue, but training devoted to when, or why, to pursue.

Waddington (2010) suggested that for the traffic offences that often trigger a pursuit a better strategy would be to have a static checkpoint, where Automatic Number Plate Recognition (ANPR) could be used to detect offenders and pull them over and where vehicles that fail to comply could be contained by road blocks or tyre deflators. He acknowledged that this would require a significant amount of work in devising protocols or Standard Operating Procedures for halting vehicles and sampling strategies and whether the amount of offences would be manageable. He proposed developing strategies for vehicles that avoid the checkpoint. Again, he calls for evaluation to judge the impact of such a policy on the behaviour of drivers and any impact it might have on public confidence.

2.5 The need for evidence-based pursuit policies

Alpert and Lum (2014) have argued that good national and local quality data about pursuits is needed to produce an evidence-based pursuit policy. They propose that reliable data is needed on seasonal incidence, the characteristics and consequences of pursuits and on the fleeing offender and participating officers. Data is also needed on the characteristics of vehicles involved, environmental context (types of roads, speed limit, population density etc.), reasons on why officers terminate and the administrative response to the pursuit. At a national level, such a database could provide a 'shared understanding' of pursuits and this could underpin more effective evaluation strategies. Alpert and Lum suggest the following questions could be asked: (See Text box 1)

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Text box 1 – Creating a shared understanding of pursuits (source Alpert ad Lum, 2014)

. Do pursuits that take place in urban, population-dense areas tend to result in more bystander injuries than those which do not?

· Do officers who operate on open highways and routes tend to initiate pursuits as a result of routine traffic violations as opposed to those who work within rural areas or inside of cities with lower speed limits?

· Are there relationships between organizational characteristics of police agencies and particular pursuit outcomes or tendencies of an officer to initiate a pursuit?

· What are the characteristics of suspects, officers, or communities that increase or decrease the risk of pursuits and/or negative outcomes?

· What characteristics of pursuits themselves tend to lead to more negative outcomes?

· What is the impact of changes in pursuit policy on agency legitimacy with the community?

· What is the impact of media and other video coverage of pursuits on their frequency as well as public perceptions?

They also call for more evaluation of pursuit policy, understanding the types of interventions that can reduce the incidence and risk of pursuits and to understand the cost effectiveness of different strategies. The key questions they suggest should be asked are shown in box 2:

Text box 2: Evaluation of pursuits (source: Alpert ad Lum, 2014)

· Does a change in the type of pursuit policy (for example, from a more judgmental to a more restrictive policy) lead to a reduction of negative outcomes, lawsuits, or damage costs?

· Are different types of technologies to stop fleeing vehicles effective and cost-effective?

· Do changes in pursuit policies affect the crime in a given jurisdiction?

· Do changes in pursuit policies affect the outcomes of a pursuit?

· Can costs and benefits of pursuits be calculated correctly and do communities have certain thresholds of the cost–benefit ratios (irrespective of legal precedents)?

This needs to happen so that we can have evidence to inform the debate about:

- The impact of not chasing or a more restrictive pursuit policy.
- To compare suspect behaviour before and after a change in policy or practice.
- To know the impact of increased penalties for fleeing the police.
- The cost effectiveness of tactical technologies related to pursuits such as roadblocks, tyre deflators, and engine disablers and the use of helicopters.
- GPS systems that track stolen vehicles such as StarChase http://www.starchase.com/ (a device designed to tag and track a vehicle).

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Moreover, Alpert and Lum argued that empirical research on pursuits has tended to describe the characteristics of pursuits but not systematically evaluated the impact of policy changes concluding that regarding more restrictive policies there is little evidence that crime rates increase, or pursuit injury rates decrease. However, restrictive policies do seem to reduce the number of pursuits and arguably reduce exposure to risk though clearly more robust research is needed.

Importantly, Waddington (2010) advocates that police forces should involve critical friends to help develop safe and effective pursuit polices. He called for more information about which factors contributed not just towards fatal pursuits (which receive intense public scrutiny) but also those with non-fatal outcomes so that a comparative analysis can be undertaken. He also argued that there should be more discussion about whether it was legitimate to initiate a pursuit in the first place.

2.6 Summary of key points

The evidence shows that most pursuits occur in response to relatively minor offences and do not warrant undertaking a high-risk pursuit. Risk factors for collisions involving police vehicles during pursuits were the police driver being young, excessive speeds, violation of traffic signals and when the pursuit involved motorcyclists. Research among suspects in the US suggested they were frightened of getting caught for minor offences and would have slowed down and driven more cautiously if they had felt safe from the police.

In terms of procedures there should be a risk assessment to decide whether it is necessary to apprehend fleeing suspects and strict operating procedures for pursuits should be embedded through training. Research from one state in the US showed that a more restrictive pursuits policy limited to 'serious felons only ' did not lead to increase an crime rates but led to 82% decrease in pursuits which arguably decreased exposure to risk of collisions and injuries, though more robust evaluation is needed.

Pursuits generate crime – a significant proportion of pursued drivers get charged with offences related to the pursuit followed by unlawful use of a vehicle.

It is generally agreed in the literature that there is no single technology that can be used as a universal solution to pursuits (because of the time it takes to set up). For minor traffic offences that often trigger a pursuit it would be better to have static checkpoint and use ANPR. [1]

Good national and local quality data about pursuits is needed to produce an evidence-based pursuit policy and there is a need to improve data collection and analysis locally and nationally. Such data is needed to evaluate:

- The impact of not chasing or a more restrictive pursuit policy
- To compare suspect behaviour before and after a change in policy or practice
- To know the impact of increased penalties for fleeing the police
- The cost effectiveness of tactical technologies related to pursuits such as, roadblocks, tyre deflators, and engine disablers and the use of helicopters
- GPS systems that track stolen vehicles

Police forces should consider involving critical friends to help develop safe and effective pursuit policies. Such critical friends could be recruited from outside the police and be able to contribute different perspectives on pursuit policy safety.

[1] The MPS deploys regular static stop site operations with ANPR assets

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3 Comparative analysis of Metropolitan police and national police data on pursuits

3.1 Data

Data was provided by MPS in individual years for three calendar years: 2016-2018. National pursuit recorded data for England and Wales was obtained for three years. Unlike the MPS data it was provided by financial year rather than calendar year (e.g. April 1st 2016 to March 31st 2017). The total number of forces that supplied data were nearly all 43 forces across England and Wales except for 2018-19 where there were only 28 forces that had submitted data. The comparisons were made between MPS and national data (excluding MPS records).

Much of the data recorded by the police pursuit recording tool has been recorded using free text descriptions which has introduced considerable variability in responses and created numerous different categories. Where possible these data have been cleaned and categories been aggregated where they refer to the same type of response e.g. recombining variables such as 'Fail to Stop' and 'FTS'. Data is analysed for individual years to show trends and compares averages across the three years. Percentages are rounded and therefore do not exactly add to 100.

3.1.1 Seasonality and daily frequencies

Data on completed pursuits collected by the metropolitan police in 2016-2018 was analysed. During this period on average there were 4-5 pursuits per day. Across 2016-2018 the characteristic high peak accounting for nearly 40% of all pursuits is between the 5-hour period of 23:00- 3:59 in the morning and the lowest level accounting for just over 10% occurs in the five-hour period of 5:00-9:59 in the morning. This pattern by time was also seen in the national data.

3.1.2 Authorisation

For the MPS data, on average around 43% of pursuits were officially authorised. This is in stark contrast to national data where over 70% were authorised. Police officers can authorise the pursuit themselves but need to justify it later (in line with the NDM). It is not clear why there are more self-authorised pursuits in London vs. national data.

It may be that the difference in the proportion of authorised pursuits is related to a greater number of short pursuits in London. Using 2018/19 data the average duration of a pursuit was 6.4 minutes for national data and 4. 4 minutes for MPS data. Looking at relatively short pursuits (those 2 minutes or less) there were significantly ($p<0.05$) more short pursuits recorded in MPS data compared to the national data (see Table 1)

Table 1

Number of pursuits by whether pursuit length is ≤ 2 minutes or > 2minutes: national vs. MPS data 2018/19

Length of Pursuit	MPS	National
2 minutes or under	672 (49%)	912 (35%)
More than 2 minutes	684 (51%)	1666 (65%)
	1356	2578

However, comparing pursuit authorisation in the sub-group of short pursuits there was still a highly significant difference in the level of authorisations, with far fewer being authorised by MPS (or more being self-authorised by the driver) (Table 2). It is not clear why this has occurred. One possible explanation is that the police officers in London work in the most densely populated city in England and Wales where the risks of pursuit remain high so police drivers/operators self-authorise but stop the pursuit themselves because of the inherently risky environment in which they operate. However, further investigation is needed to clarify this.

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Table 2

Pursuits that last 2 minutes or less by whether authorised or not: National vs MPS data 2018/19

	MPS	**National**
Authorised	116 (17%)	663 (73%)
Not authorised	556 (83%)	249 (27%)
	672	912

3.1.3 Subject vehicle type involved in the pursuit

For MPS data most vehicles pursued were cars but over time a growing proportion of subject vehicles were motorcycles (this term includes mopeds and scooters) representing nearly a 10% increase comparing 2016 with 2018 (Table 3). Compared to national average data the proportion of motorcycles as subject vehicles was nine times greater for MPS data (Table 4).

Table 3

Percentage of pursuits by type of subject vehicle 2016-2018 (Source: MPS data base)

	2016 (N=1304)	**2017(N=1808)**	**2018 (N=1356)**	**Average %**
Subject Vehicle	**Percentage**	**Percentage**	**Percentage**	
Car	68	60	59	62
Motorcycle	28	36	37	34
Passenger service vehicle	<1	< 1	1	<1
Sports utility vehicle	<1	1	<1	<1
Van	<1	3	3	2
Total	**100**	**100**	**100**	**100**

Table 4

Percentage of pursuits by type of subject vehicle 2016-2019 (Source: National data base)

	2016-17 (N=8690)	**2017-18 (N=5260)**	**2018-19 (N=2578)**	**Average %**
Subject Vehicle	**Percentage**	**Percentage**	**Percentage**	
Car	91	88	85	88
Motorcycle	3	3	4	3
Passenger service vehicle	<1	<1	<1	0
Sports utility vehicle	2	3	4	3
Van	4	5	6	5
Total	**100**	**100**	**100**	**100**

3.1.4 Reason for pursuit

In the MPS data the two main reasons given for the pursuit were 'criminal activity' followed by 'failed to stop'. Interestingly the proportion of 'fail to stop' responses decreased from a third to a quarter with a corresponding increase in 'criminal activity' being given as a reason between 2016 -2018. Whilst 'fail to stop' accounts for a quarter to a third of all reasons given it does not provide a reason why the vehicle driver was requested to stop in the first place – more accuracy needs to be given here (Table 5). Failed to stop was nearly six times more likely to be recorded as the reason for the pursuit by MPS compared to the average of the national data. Traffic offences were three times less likely to be recorded as the reason for the pursuit in MPS data vs. national data (Table 6).

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Table 5

Percentage of pursuits by reason for pursuit 2016- 2018 (Source: MPS data base)

	2016 (N=1304)	2017 (N=1808)	2018 (N=1356)	Average %
	Percentage	**Percentage**	**Percentage**	
Criminal activity	36	41	43	40
Failed to stop	32	28	25	28
Stolen vehicle /suspected stolen	14	12	12	13
Traffic offences (unspecified)	2	9	3	5
Manner of driving (potential risk to others e.g. speed, drunk/drug driving/signal violation)	4	6	14	8
Others	12	4	3	6
Total	**100**	**100**	**100**	**100**

Table 6

Percentage of pursuits by reason for pursuit 2016- 2019 (Source: National data base)

National average	**2016-17 (N=8690)**	**2017-18 (N=5260)**	**2018-19 (N=2578)**	**Average %**
	Percentage	**Percentage**	**Percentage**	
Criminal activity	42	44	38	41
Failed to stop	8	1	<1	5
Stolen vehicle /suspected stolen	20	15	35	23
Traffic offences (unspecified)	16	15	10	14
Manner of driving (potential risk to others e.g. speed, drunk/drug driving/signal violation)	5	5	<1	5
Others	9	20	15	12
Total	**100**	**100**	**100**	**100**

3.1.5 Reason why pursuits are discontinued

Around a fifth of all pursuits were discontinued. In the MPS data the main reasons given for discontinuing the pursuit were because of the disproportionate risk posed to the public, or because of unsatisfactory risk or tactics by police (Table 7). In the national data, the proportion of pursuits that were discontinued because of the disproportionate risk to the public was more than twice that of MPS data (Table 8).

Table 7

Percentage of pursuits by reason why pursuit was discontinued 2016-2018 (Source: MPS data base)

	2016 (N=276)	**2017 (N=401)**	**2018 (N=185)**	**Average %**
Reason why pursuit was discontinued	**Percentage**	**Percentage**	**Percentage**	
Disproportionate danger posed to the public	26	24	33	28
Disproportionate danger posed to the subject	17	17	15	16
Unsatisfactory communications	6	5	7	6
Unsatisfactory dynamic risk assessment	24	28	30	27
Unsatisfactory tactics	23	25	16	21
Not authorised by another force		<1		
Miscellaneous/unknown	4	1		2
Total	**100**	**100**	**101**	**100**
% of all pursuits that year	**21**	**22**	**14**	**19**

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Table 8

Percentage of pursuits by reason why pursuit was discontinued 2016-2018 (Source: National data base)

Reason why pursuit was discontinued	Percentage (N=1480)	Percentage (N=799)	Percentage (N=417)	Average %
	Percentage	Percentage	Percentage	
Disproportionate danger posed to the public	45	66	68	60
Disproportionate danger posed to the subject	8	10	10	9
Unsatisfactory communications	3	3	2	3
Unsatisfactory dynamic risk assessment	6	3		5
Unsatisfactory tactics	37	17	18	24
Miscellaneous/unknown	1	1	2	
Total	100	100	100	101
% of all pursuits that year	**17**	**16**	**16**	

3.1.6 Person who terminated pursuits

For MPS data, when a pursuit was terminated this was mainly done by the control room supervisor (Table 9), whereas nationally it is more evenly split between the supervisor and pursuit commander (Table 10).

Table 9

Percentage of pursuits by who terminated the pursuit 2016-2018 (Source: MPS data base)

	2016 (N=276)	2017 (N=401)	2018 (N=185)	Average %
Person who terminated the pursuit	**Percentage**	**Percentage**	**Percentage**	
Control room supervisor	76	77	66	73
Other person involved in the pursuit	5	6	11	7
Pursuit commander	18	17	23	19
Other Force Control Room		<1		
Officers involved	<1			
Other				1
Total	**100**	**100**	**100**	**100**

Table 10

Percentage of pursuits by who terminated the pursuit 2016-2018 (Source: National data base)

	Percentage (N=1480)	Percentage (N=799)	Percentage (N=417)	Average %
Person who terminated the pursuit	**Percentage**	**Percentage**	**Percentage**	
Control room supervisor	36	41	47	41
Other person involved in the pursuit	29	5	7	13
Pursuit commander	33	46	45	42
Officers involved	3	8	<5	6
Unknown			3	
Total	**101**	**100**	**100**	**100**

3.1.7 Outcome of pursuit

Arguably, most of the pursuits that occurred did not end up with a successful outcome in terms of apprehending the subject with most being discontinued or the subject being lost (on average 19 % and 40% respectively) (Table 11).

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Nationally, the equivalent figures are much lower at 14 and 21% with responses that tactics were successful being three times greater (Table 12)

Table 11
Percentage of pursuits by outcome 2016-2018 (Source: MPS data base)

	2016(N=1304)	**2017 (N=1808)**	**2018 (N=1356)**	
Outcome of pursuit	**Percentage**	**Percentage**	**Percentage**	**Average %**
Police vehicle disabled	<1	<1	<1	< 1
Pursuit discontinued	21	22	14	19
Pursuit not authorised as not classified (unmarked vehicle)		<1		
Subject lost	37	41	42	40
Subject vehicle abandoned	16	13	13	14
Subject vehicle stopped	21	21	25	22
Tactics successful	4	3	5	4
Crashed/decamped	<1			
Miscellaneous	<1			
Total	**100**	**100**	**100**	**100**

Table 12
Percentage of pursuits by outcome 2016-2018 (Source: National data base)

	2016-17 N=8690	**2017-18 N=5260**	**2018-19 N=2578**	**Average %**
Outcome of pursuit	Percentage	Percentage	Percentage	
Pursuit discontinued	13	15	15	14
Subject lost	22	19	21	21
Subject vehicle abandoned	26	26	24	25
Subject vehicle stopped	18	19	20	19
Tactics successful	13	17	15	15
Crashed/decamped	<1	<1	<1	<1
Miscellaneous	7	3	4	5
Total	**100**	**100**	**100**	**100**

3.1.8 Injury rates for pursuits

A key outcome of importance in understanding the safety of pursuits is the injury rate per 100 pursuits and how this changes over time to measure risk and whether policies are being effective. The all injury risk varies for the police, subject and members of the public. The highest risk is for subjects and the lowest for the police (Table 13). Notably, over time whilst the injury rate to police has been variable and the injury rates for subjects has remained relatively stable, the injury rate to members of the public has decreased by about a half (Figure 1). The risk of severe injury is less than 0.5%. (Figure 2).

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Table 13

Number and rates of injury by person injured 2016-2018 (Source: MPS data base)

2016	**Minor**	**Moderate**	**Severe**	**Total**	**Rate per 100 pursuits**
Injury to police officer	4	1		5	0.38
Injury to member(s) of the public	12	3	4 (1 fatal)	19	1.46
Injury to subjects	21	7	1	29	2.22
2017	**Minor**	**Moderate**	**Severe**	**Total**	**Rate per 100 pursuits**
Injury to police officer	3			3	0.16
Injury to member(s) of the public	10	7	1	18	0.99
Injury to subjects	16	18	6	40	2.21
2018	**Minor**	**Moderate**	**Severe**	**Total**	**Rate per 100 pursuits**
Injury to police officer	7	2		9	0.66
Injury to member(s) of the public	7	3	1	11	0.81
Injury to subjects	21	7	4	32	2.36

Figure 1

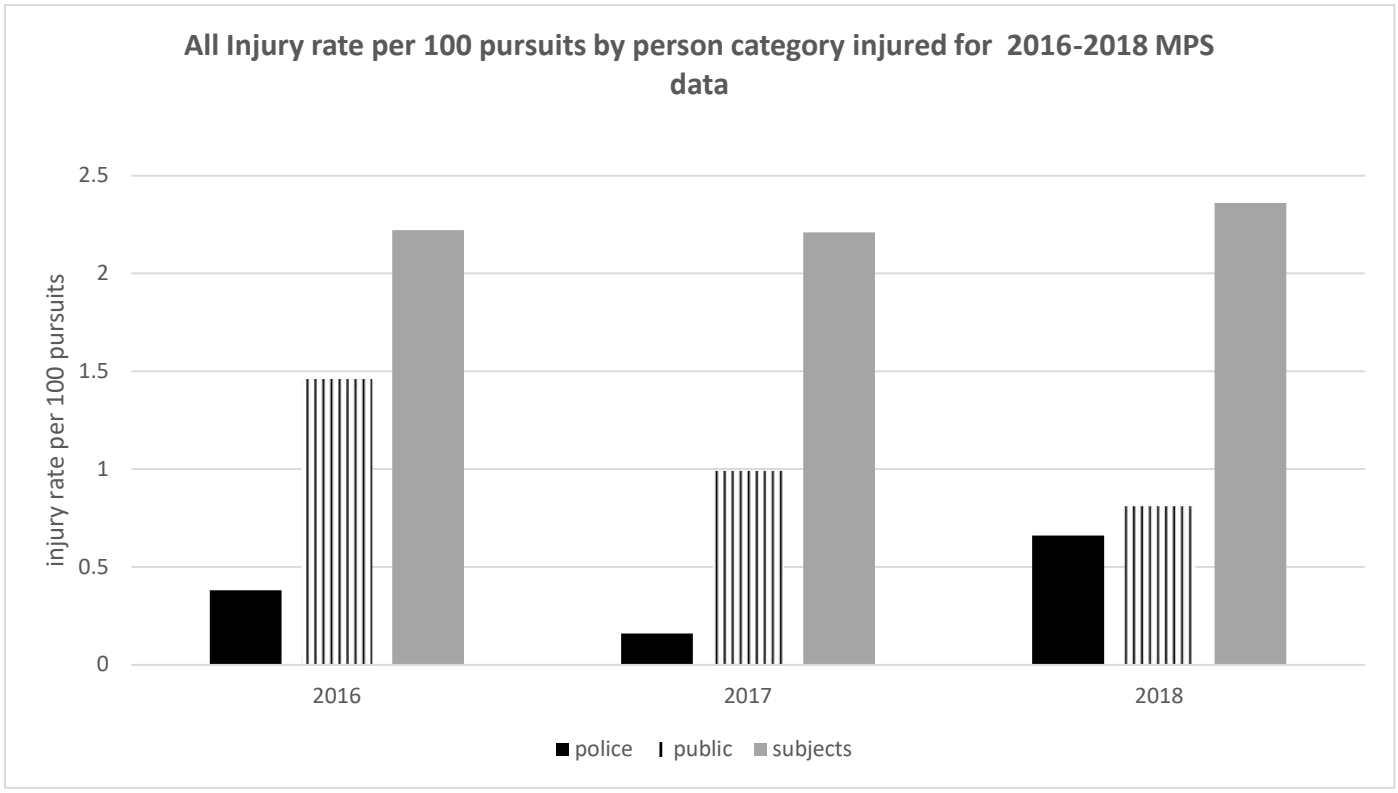

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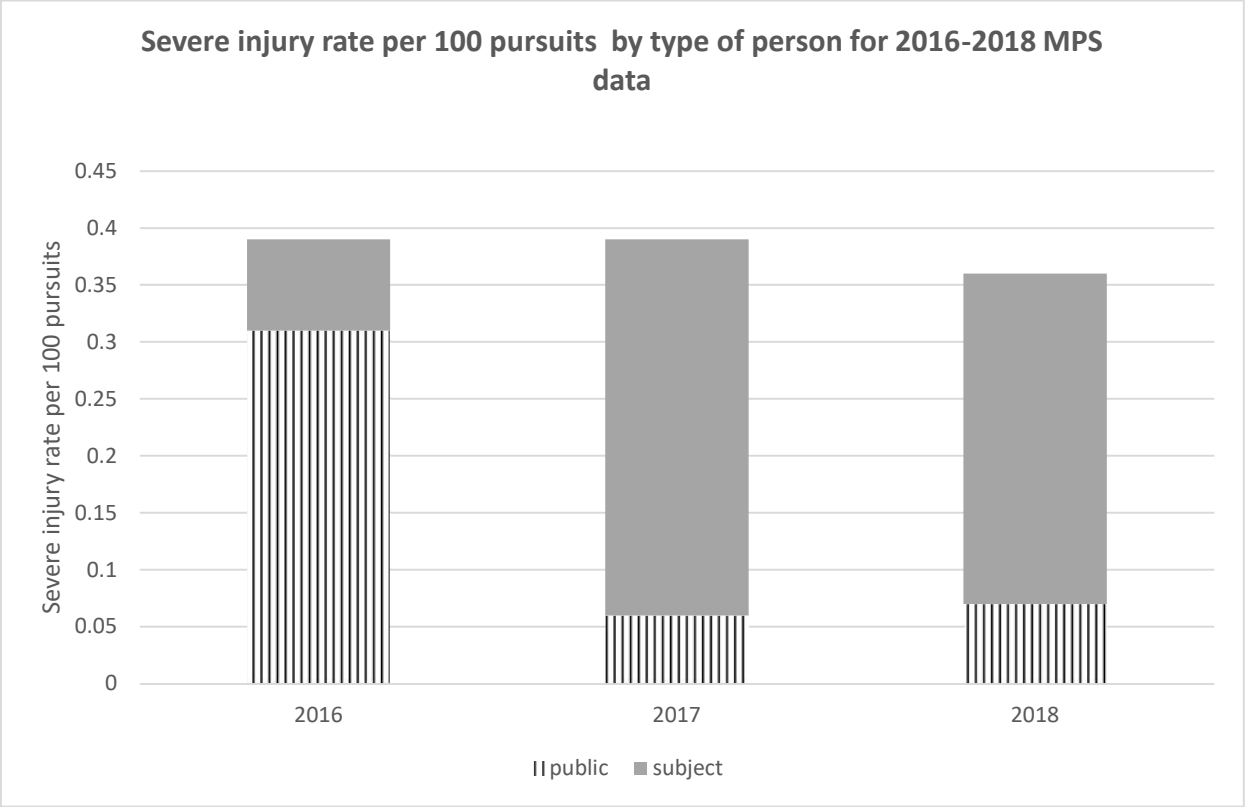
Figure 2



Comparison of pursuit injury rates between MPS and the national data shows that rates of injury are lower for MPS pursuits compared to national data and the national data does not show the same reduction in risk to the public (Figure 3). For example, in 2018 the MPS injury rate was three times lower for police and nearly two times lower for subjects compared to national data estimates.

It is not clear what explains these differences as it is likely that policies, number of police resources, crime levels and population density are likely to influence whether a pursuit is initiated in the first place and how quickly it is discontinued because of lack of safety.

Figure 3

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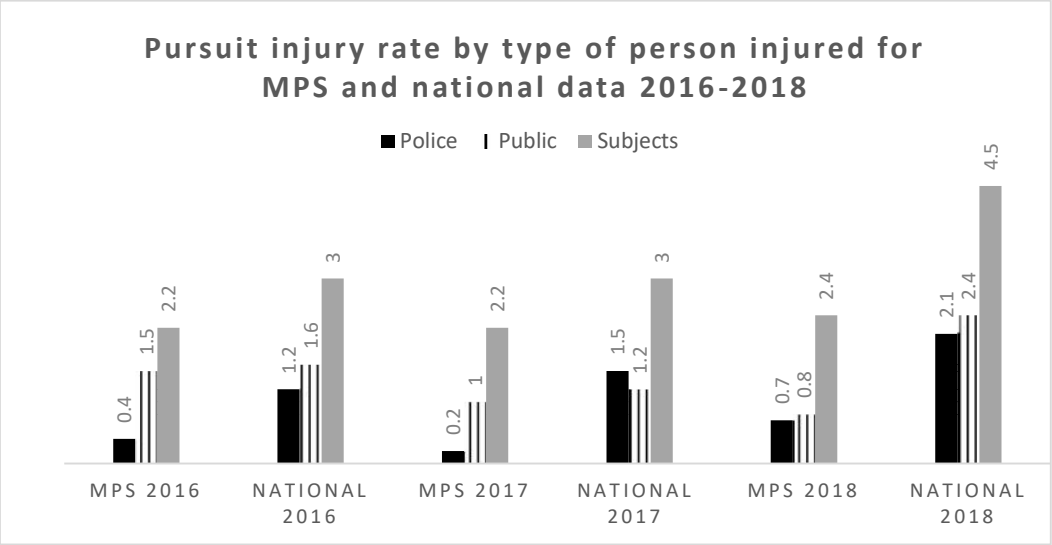

3.1.9 Details of MPS pursuit crashes where someone was injured

On average, 'criminal activity' accounted for nearly half of all reasons given for pursuits for the injury-related pursuits, whilst nearly a quarter were 'fail to stop' (Table 14). Most of these pursuits were authorised which probably reflects the greater incidence of the pursuits being caused by criminal activity. Of these pursuits, on average, 21% involved a motorcycle subject vehicle though in 2018 the percentage was notably high (31%). Over time 'criminal activity' as a reason recorded for a pursuit has increased by nearly 20% between 2016 and 2018. Arguably, there is scope for reducing pursuits by addressing 'fail to stop' and traffic offences – but it needs to be clear what the specific reasons are behind these general categories.

Table 14

Pursuits where someone was injured by reason for the pursuit, authorisation, subject vehicle involved and helicopter mobilisation (Source: MPS data base)

	%(n=53)	%(n=61)	%(n=52)	Average
Reason for pursuit	**2016**	**2017**	**2018**	
Criminal activity	36	46	58	47
Stolen vehicle	23	8	12	14
Traffic offences	8	16	15	13
Fail to stop	28	30	13	24
Unknown	3		2	2
Total	100	100	100	100
Authorised	62	52	83	66
Subject vehicle:				
Car/van	85	82	69	79
Motorcycle	13	18	31	21
Helicopter mobilised	32	39	44	38

3.2 Summary

The data collected by pursuit recording tools used by police forces is a good starting point to get a handle on the nature of pursuits. However, much could be done to streamline the dataset by having drop down menus which classify the data on pre-determined codes. The analysis carried out therefore needs a 'health warning' over data quality. Much more detail needs to be given about 'fail to stop' and traffic offences for example with the latter

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whether they were licence or insurance offences or whether it was violating speed limits, drunk driving or other behaviours that could put the public at risk. 'Fail to stop' needs to be qualified as a reason for the pursuit – it provides no information about what triggered the request to stop in the first place. In the MPS data, 'fail to stop' was much more likely to be used as a reason than in the national data.

The MPS data shows that their injury rate per 100 pursuits is much lower than the national average but it is hard to know whether this is related to a more restrictive pursuit policy or how pursuit management is configured. For example, the control room supervisor seemed to take a greater role in decisions to terminate pursuits compared with the national data.

Clearly the motorcycle pursuits appear greater in London and is a growing proportion of pursuits over time and this may reflect the nature of crime in the area or policies regarding preventing crime.

The MPS data shows that for 40% of the pursuits the subject was lost compared to 21% of the records in the national data. More needs to be understood as to why this has been observed.

4 Interviews with MPS staff involved in pursuits

4.1 Drivers and Operators

4.1.1 Initial risk assessment

There was a general consensus on the key aspects of risk assessment before undertaking a pursuit. In most cases participants had to balance the seriousness of the offence (is a pursuit a proportionate response) against whether it is safe to pursue taking into account the nature of the traffic, whether there were likely to be high levels of traffic and pedestrians especially at school turning out time or whether there were licenced premises on route. The age of the offender was not always taken into account because it was not always identifiable. Similarly, the vulnerability of those on powered two wheels may come into the equation in deciding whether to pursue especially in a patrol car in an urban area where it would be difficult to match their manoeuvrability.

Most participants said they were more likely to pursue if the vehicle or occupants was associated with criminal activity, related to aggravated crimes and firearms or terrorism. Most said they would not pursue for minor traffic offences or would seek to apprehend the offender using other tactics – such as going to their known address.

4.1.2 Reasons why police want to pursue

Suspicion

There are several triggers for police pursuits. Many participants described pursuits as spontaneous based on a 'hunch', a 'coppers nose' or intuition about a potential offender though it was not clear how this was operationalised:

> *For me, there's no hard and fast rule on when to and when not, if the intelligence is there to support it, I will. If the intelligence isn't there, but I have a gut feeling that it's necessary and it's hard to quantify what that is, then I will as well…..a copper's nose. You've got a vehicle that looks suspicious in either a suspicious location or suspicious in time of day or suspicious in the manner it's being driven. It's all these elements that go together to form a bigger picture on a range and will just kick-start your gut feeling. It's difficult to quantify. (Driver Participant 10)*

Participants reported that in these circumstances seeking evidence to corroborate such suspicions proved problematic:

> *Unless it has been flagged up through ANPR or it's been circulated on the radio and then you stumble across it, but yeah, 9 out of 10 times, that intelligence isn't there even when you put it up to the pursuit channel. You*

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could be putting that up and it won't be until maybe 3 or 4 minutes later, they then inform you that the vehicle is lost or stolen or there's intelligence that the guy is wanted, but those 3 or 4 minutes you've already been pursuing it without that intelligence and then that builds your grounds to justification almost to continue that pursuit (Driver Participant 5)

Fail to stop

Initial suspicions of the police led to a request from them to the driver or rider to stop and in a number of cases this triggered further offences of failing to stop and leading to a pursuit:

Say you had a person that had failed to stop for police, it is an offence, I would say it's proportionate to pursue them in order to try to establish who they are and be able to prosecute them for that offence, but then you have to weigh up the other factors involved and if the risks become too great, then I would say it would no longer be proportionate. (Driver Participant 4)

The general feeling was that if someone failed to stop, they were guilty of something:

I think if someone failed to stop for police, there's quite clearly a reason, no normal upstanding member of the public, if a policeman went to stop you, you will not just instantly make off, there must be something in the vehicle or that the person might be wanted, there has to be a reason why they're making off in the first place. (Driver Participant 10)

4.1.3 Issues around authorisation of pursuits

Police on patrol can self-authorise (if they can justify this in line with the NDM) but are advised to seek authorisation to continue a pursuit and whether this is granted depends on the control room's own 'objective' assessment of the risk. Many of the driver participants identified several problems with the authorisation process including the quality of radio communication, the dynamic between the patrol police and the control room and the lack of timely intelligence. This could potentially explain the higher rates of self-authorisation.

Radio communications

Most participants commented that radio communications with the control room to get permission to pursue were difficult and frustrating:

Sometimes we have to ask several times to ask if it's been authorised and they still won't give you the answer, then they will authorise it and then they'll change their mind again and then they will authorise it, and then they'll change their mind again, and then this is authorised. In the end you're sitting there turning the blue lights on and off……. There is nothing more frustrating than trying to transmit information on a radio and every time you hit it the button's bounced off because you can't transmit information because they're too busy talking to someone else. (Driver Participant 5)

Participants felt that authorisation decisions could be facilitated by having a dedicated pursuit channel and better radios:

Better radios for a start. Half the time you try and give the correct information and there are problems with radio coverage and get cut off, and also, I don't know, I don't work in the control room so I don't know if there is one person listening or if there are 3 people listening to you and they're all making a decision. I don't know how it works, but something needs to happen where they come to a decision a lot sooner. (Driver Participant 10)

A 'permission to talk' command was not seen as a very useful strategy to control the flow of information as it would 'over complicate matters' and waste time in a highly time pressured context:

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I don't think that would be any use at all because every time you ask for permission to talk, you're wasting 2 seconds, 3, or 4 seconds. (Driver Participant 3)

Dynamic between control room and patrol

Many of the driver participants expressed a 'disconnect' between patrols and the control room leading to difficulties in conveying risks and seeking authorisation which the drivers felt was in part because people in the control room were not experienced pursuit drivers which limited their understanding of making the right decision about the risk level:

Generally issues are a slight disconnect between the officers involved in the pursuit and other units who are making their way to it, also slight disconnect between the officers involved in pursuit and the control room supervisors who can call an end to the pursuit and some issues as you might have an operator who's very new and hasn't been involved in a pursuit before and if they turn around and they say I'm not happy, I'm not comfortable with this, then we'll call it off as well and it might be, for example, that they're a non-driver and they don't actually drive a car, so what they think is dangerous might be far different from mine or yours, but if they'd say we're not happy with this, then I'll pull over and stop (Driver participant 7)

It was also felt that control room staff were risk averse, lacked courage and couldn't see the 'wider picture':

If you've got the background and intelligence then it might help them make a judgement, but I don't think they often see the wider picture, I think they're scared of potential implications and they'd rather have evidence to back up their decision rather than err on the side of caution. (Driver Participant 6)

However, some participants thought the 'remoteness' and 'objectivity' of people in the control room was required to ensure the safety of pursuits:

The person that's responsible for the authorisation is not involved in the pursuit, they're monitoring the pursuit, so they've got a clear fresh mind, so they can see objectively. I think that's the best way to look at authorisations of a pursuit and that's to do it from an objective basis rather than being involved with the pursuit or involved in the investigation. (Driver Participant 9)

4.1.4 Crew dynamics and impact on risk assessment

The importance of an experienced operator

Participants identified one of the main problems of pursuit safety was the dynamic risk assessment. It was felt by most drivers that it was essential to have an operator who was also was an experienced driver who understood the risks and who could provide an accurate commentary to the control room:

Interviewer: Why do you feel there's a problem with the operator?

Participant: Because they don't know to manage the pursuit. Again, it comes down to training. Generally, the operator is a less experienced, less serviced member in the car. The driver's got more experience, that's why they're the driver. They've got more years of service, that's why they're the driver. The operator is probably a basic driver at best because if he or she was a response driver, they would be out driving a response car. Their driving experience is going to be a lot less. They may not even be a driver. Yet you're asking them to effectively take control of the pursuit situation. (Driver Participant 8)

Many participants spoke of the dynamic between the driver and operator and how this could affect risk assessment. The driver was seen as 'king pin' and often the operators were less experienced, which some felt meant that the operators might find it difficult to challenge the driver's behaviour if they felt it was too risky:

Usually the operators are junior PCs, I am third most senior person on my team. I've got 14 years of service. I've been driving for 8 years. It would take a very strong confident operator to turn around to me and say anything about the driving (Driver Participant 11)

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There was a feeling among participants that the training for operators was inadequate and this was a hindrance to managing the risk of pursuits:

> *Interviewer: Where the pursuit is double-crewed, to what extent does the dynamic between driver and crew member influence your ability to assess risk?*
>
> *Participant: As a driver my crew member doesn't, it's their ability to pass the information to the control room which is important and unfortunately that's where the MET's fallen down a lot. I'm experienced, I can do it and I can drive and do a running commentary as well because that's part of the training as a driver, but a lot of the crew will get the operators who are low on experience, never done a pursuit, half of them don't drive, they have no idea where they are on the borough a lot of the time because they have other commitments and not learning as much as I used to, so the operator that is passing information back is a huge hindrance. (Driver Participant 11)*

Training for operators

For one participant (experienced TPAC) the solution to this was more training:

> *The operators need higher training, that's without a doubt. It's a computer-based training package and I think it's about half an hour, maybe an hour, they do that once, that's not really enough and put them on a TPAC driving course, put them in the back of the car. (Driver Participant 3)*

This sentiment was also echoed by another driver:

> *Without a shadow of a doubt the training particularly to police operators is woefully inadequate. It is nothing like it should be. When I joined there used to be a radio operator's course at Farrow House which was up at Hendon where you'd go and you'd learn, a) how to speak on the radio, so you'd follow the a, b, c – accuracy, brevity, clarity, you'd learn what is important, you'd learn the etiquette of speaking on a radio and you'd learn how to relay the necessary information from what you are seeing to the information room, so that they can make an informed judgement about the pursuit, and that is not offered any more, I think they're given something like 10 minutes. When you join the police, during your probation, you go for further training throughout your probation and in one of these sessions they are given a little input on how to give a commentary, but it's totally inadequate. (Driver Participant 8)*

4.1.5 Motivational factors which affect risk

Many of the participants talked about several motivational factors which they felt could affect their ability as a driver to make rational decisions about the risks they were undertaking. Many had experienced red mist or had seen it in others. A term that was frequently used was 'being sucked in', this was not so much about red mist but a total focus or fixation on stopping the pursued:

> *Yes, I can honestly say, yes, I was just locked into the back of the car and I was just going to chase and chase and chase. (Driver Participant 2)*

Some participants felt that it is not easy to manage the experience of getting sucked in or fixated:

> I *don't think I managed it at all to be honest. I think it's just human nature when you're trying to do a job. I got so, I won't say angry, but I definitely got sucked in and I didn't manage it at all at the time, but it wasn't until afterwards when I looked back on it and I thought to myself yeah, I definitely got tunnel vision. When you're pursuing, and even when you're driving in response mode, you're taught to scan the road, you're taught to look ahead of the vehicle, to look to the left, right, so you can see the full picture and I looked back and I reviewed what I did after this incident and I just remembered I had tunnel vision, I just focused on the car, the headlights, I don't remember seeing anything to the left or right or ahead of the vehicle and I didn't manage it at all. (Driver participant 9)*

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Some participants related this fixation to motivations of getting a result for the team:

> *I had one incident where I was following them for a while sometime back and I suppose the red mist did come down. I wasn't driving in anger I would say, but I think if I had a video of that scenario now, a lot of people would probably say you've got to suck it in well and truly there because you are challenged to get results and it's not an emotional or personal thing, we're told to get results then sometimes that's what we've got to do. I think that was more of a driver for me to try and get a result for the team. (Driver Participant 12)*

Strategies to manage this were described in terms of self-teaching to deep breath and keep calm and the more experienced you become the more you can manage it:

> *It's a case of more experience makes you better at managing things like that, managing high stress, managing the adrenaline dump that occurs when you're in a very fast-moving pursuit situation. You are able to almost step outside yourself and be as objective as possible about things. (Driver Participant 8)*

The role of the operator was also seen as important to 're-set' the driver when they appeared fixated:

> *Talk to them and try to re-engage with them because they start to lose focus on what you're trying to do. If you can speak to them and divert their attention away from that, then it can help to re-set what they're doing. (Driver Participant 6)*

Other motivational factors that affected driver's fixation were talked about in terms of bravado and not wanting to lose face by losing the pursuit:

> *…think there's a bit of saving face. I mean there's a cultural risk of humiliation from colleagues that you've been involved in a pursuit, you've started it and you've not seen it through to the end (Driver Participant 9)*

Personal repercussions

Most of the participants were acutely aware of the personal implications for them and that if a pursuit went wrong and someone was injured there would be very little legal protection for them. Arguably, this has led many drivers to be more risk averse and this became part of the decision-making on whether a pursuit was a proportionate response:

> *It's something I've thought about when I've had a vehicle make off and I think if I chase it and they crash and it goes wrong, then I'm in potentially a lot of trouble, so it does cross your mind there, if something goes wrong then you may be well hung out to dry.(Driver Participant 1)*

4.1.6 The role of air support in reducing risk

Air support was viewed extremely positively by participants because it could take pressure off the drivers and gave a 'heads up' of the prevailing conditions which could affect the risks involved in a pursuit:

> *Interviewer: What role would you say does air support play in terms of actually assessing risk? Participant: Massive, so one example, I can give you a situation on a dual carriageway, a 6 lane dual carriageway, the helicopter came over and had been involved in a pursuit for a little while and took over the commentary and the helicopter put over the radio, guys, there's static traffic sitting at red traffic lights on this dual carriageway about a mile away from where you are, so all the police vehicles backed off completely at that point and if that helicopter hadn't been there because there was a bend on the road, we wouldn't have known it until we got to where we were.(Driver Participant 2)*

4.1.7 Learning from pursuits

Most participants said that unless a pursuit had ended in injury or damage there was no formal debriefing, instead it was largely informal, but they recognised it could have value:

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> *I'm not aware of any of my officers that have been involved in pursuits partaking in any debriefs, I personally haven't run any debriefs for anyone else in pursuits, so I don't know if the control room environment has a debrief process built-in to their decision making process or their post decision making process. I don't think it's something that we consider unless something's gone wrong. I can see where it would benefit from having it, why learn from when things go wrong when you can learn from when things go right as well. There are benefits of having debriefs, but I don't think we do. (Driver Participant 9)*

Though for one participant this happened informally after every pursuit:

> *Participant: I've had them with my operator when we've finished pursuits.*
> *Interviewer: Does it happen after each one?*
> *Participant: Yes, for me it does, for me after each one. We would have a chat about what went well, what didn't go well, what did they think? Were there any points for me and any points I had for them.*
> *(Driver Participant 3)*

4.1.8 The National Decision Model (NDM)

The National Decision Model was viewed by most participants as something that was engrained in their operational practices and worked almost at a subconscious level to shape their decision-making:

> *It's about information received, your assessment, your powers and policies, what you can do and it's a constant cycle and even if people won't know the national decision-making model off the top of their head and by heart, as police officers, I generally find that when I speak to them afterwards, their thoughts and rationale do follow the general pattern of it. We're so used to dealing with legislation and making decisions and fast time decisions, we do it all the time anyway (Driver Participant 7)*

One participant found it particularly useful post incident to provide a standardised way of assessing risks:

> *I think it helps more post incident, so during the incident I think it's too lengthy, too long a process to go through all of it, but post incident it helps because it can draw things out which you might have missed otherwise, but I think it's good in that it gives standardisation and it gets officers to think about risk. (Driver Participant 2)*

4.1.9 Risks associated with powered two wheelers

Most of the participants raised risks associated with pursuing powered two wheelers such as motorbikes, mopeds and scooters:

> *Two-wheeled motorbikes at the moment are untouchable for the normal response driver, it never used to be like that and since they took the power of pursuit off of the response drivers, the escalation in 'fail to stops' with two-wheels has just escalated out of all proportion, so now we can't chase them. They do whatever they want, when they want if they want, they don't stop at red lights, they cause an absolute terror and there is nothing we can do about it. (Driver Participant 11)*

4.1.10 Improvements

Participants made a few recommendations for improving the safety of pursuits:

1. Training people on how to commentate in a pursuit or analyse risk correctly
2. Get all the team involved in pursuit management to understand dynamic risk assessment from a driver's perspective by them sitting in with police on the driving course
3. Greater training for operators so they are familiar with the task demands of high-speed training and provide them with more training in how to do a dynamic risk commentary
4. Greater training for drivers, for example a 6-week course which demands higher standards
5. Being able to use containment strategies without having to request authorisation such as for tyre deflators
6. Training in the pursuit of two wheelers

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7. Introduce regular refreshers courses in line with training for firearms

4.2 The control room

4.2.1 Motivations

In contrast to the drivers who were motivated to stop offenders the main motivation of the control room staff was seen as to protect public safety in the event of a pursuit:

> *It's the safety to begin with then the offence, how safe is a pursuit going to be in those seconds that I've got to make the risk assessment….During my initial risk assessment, if I'm happy that members of the public are not in immediate danger, I think that's proportionate to continue, but as soon as that changes, I would then terminate (Control room Participant 1)*

There was one participant who felt that it was difficult to balance the threat to public safety vs. addressing criminal behaviour:

> *Damned if you do. Damned if you don't. If we continue with the pursuit and then he hits a member of the public, we think, oh, should we have terminated this earlier? If we do terminate it earlier and then he crashes into a member of the public, should we have continued it, and could we have concluded it a little more safely? You have no idea how it's going to conclude (Control room Participant 4)*

Participants felt that the process of authorisation could be improved by having people who are pursuit experts:

> *Having a dedicated team of people that just eat, breathe and do pursuits, that's the only way I think it could be improved any way, but the way it is now, everyone is a jack of all trades and master of none. Whereas if you've got someone that they're an expert in it then I think it would be better. (Control room Participant 5)*

It was also felt that new technologies have a role to play:

> *If the technology was in place for all vehicles to have that facility and a facility to down link it to us in the control room, we could then make a far better judgement of the risk certainly when it comes to road conditions (Control room Participant 7)*

4.2.2 Risk averse

Participants in the control room were much more risk averse compared to the drivers, would prefer different tactical options and would not authorise a pursuit or would terminate it if they felt the justification by the driver was not acceptable:

> *If an officer tells me he just failed to stop and they've got nothing else on this apart from their sort of sense that they think they're up to no good and I think that from what they've told me, I've got no further intelligence coming through or I'm not happy with the answers they're giving me about their speed, about the manner of driving because obviously they go through red lights, wrong side of the road, mount the pavement. Like yesterday I had one in a busy town centre, he went through a red light which they didn't tell me straight away, he then mounted a pavement and this is all within seconds and went down the wrong side of a carriageway and as soon as he said that, I said terminate and this must have been a minute if that. (Control room participant 10)*

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4.2.3 Protect them from themselves

One control room participant described their role as helping to protect the driver from themselves and any adverse consequences of being involved on a pursuit:

> *Because someone could get killed and I've got to protect the officers from themselves, I've got to protect the person driving the car. (Control room Participant 1)*

4.2.4 Repercussions

Control room staff were acutely aware that they would be publicly accountable for their decisions if there was an adverse outcome of a pursuit:

> *They don't mean to frighten people by it, but they stress it very heavily that if you make the wrong decision, you're going to be held accountable to the court. (Control room Participant 2)*

4.2.5 Information communication

Control staff said they were highly reliant on the drivers/operator providing good information or risk commentary quickly in order for them to assess risk:

> *We rely obviously on the commentary being given by the operators in the police cars. If they are suitably trained, then you'll get a good commentary and you will get a good idea of what's going on.*
> *How often would you say you get a good commentary and how often is not so good?*
> *Probably one in 2 or 3 if it is a really good commentary……You can literally have somebody that has just come out of training school stuck in a police car and he will be relying on saying what the driver of the police car is saying to him, now the drivers of police cars when you get to the advanced levels, you have to do a radio commentary, you have to drive and you have to talk about what you can see - road conditions, pedestrians, everything and that's one of the passes or fails in whether you pass, so the drivers have got a good idea of what they need to give a commentary, the operators don't have. (Control room Participant 2)*

However, control staff that there was often not enough time to communicate and often communication was compromised by poor sound on the radio channel which led to early termination decisions:

> *I think it's so split second and if the communications are bad, the radios are bad, or they've got 2 tones going and I can't hear what's being said, I will terminate. I will not continue if the communications are bad. I will give them one warning, but if they don't give us the right information or someone else uses the radio, then it will be terminated (Control room Participant 2)*

4.2.6 Importance of a good risk commentary

Control room participants said that a key task that operators need to perform well is the risk commentary so that they can make a clear assessment of risk and take this into account in their decisions on authorising or terminating a pursuit. Most operators were described as giving poor quality risk commentaries:

> *Generally, you'll find the better trained police drivers the ones that are TPAC which is the top, they're the ones that will give generally the best commentary because they are traffic or firearms officers, so they're quite cool and controlled. It is some of the borough officers with the smaller response vehicles that are*

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> *potentially more excitable, or not particularly trained in radio procedures and will just waffle on about a location where they're going. (Control room Participant 3)*

One participant described getting a risk assessment from drivers was like 'pulling teeth' and they often had to 'dig for evidence' of why a vehicle should be pursued:

> *Yeah, sometimes you really have to pull teeth, and again, I've got very narky with an operator who's not giving me forthcoming information and I've made it blatantly clear, if you do not answer my questions, I am going to terminate this pursuit. It's quite clear. I need the information. You have to tell me what you are seeing. If you do not tell me, I cannot make a risk assessment. We cannot assess what is going on and cannot continue with this pursuit (Control room Participant 4)*

The addition of TAC advisor to the control room was felt to very useful in judging risk:

> *The TAC advisor is a useful member and how they convey the message and a lot of the information they say is pretty much standard. (Control room Participant 3)*

4.2.7 Training and policy updates

Participants felt that the policy landscape around pursuits was changing rapidly and that '*Rules changing with pursuits – hard to keep up form a training point of view.' (Control room Participant 2)*

One participant suggested that all those involved in a pursuit need to be trained to have a better understanding of the respective roles of the people in the control room:

> *The borough-based officers that are all very keen and want to be a bit 'Bodie and Doyle' and chase the suspects around the borough and don't appreciate what we're doing in our control room and think we're just all sitting there picking and choosing and saying, oh, no don't fancy this one, we'll call it off, and they think we're against them, we're just saving them from a whole host of grief (Control room Participant 4)*

It was felt that training could be enhanced by having to listen to live recordings of pursuits:

> *What would be nice I think is to have to listen to live recordings of previous pursuits, so you can actually practice on those rather than having colleagues of yours on a radio somewhere else in the building. It would be nice to listen to live pursuits and have to type it as if you were the pursuit operator in that pursuit (Control room Participant 7)*

Several participants mentioned that they would like more training on the NDM:

> *I think quarterly update training and not by email. People bombard you with emails and things like that don't help too much. I think a classroom or small group environment is more conducive to learning. If you had a pursuit put together in a small group, you could go through it bit by bit. What would you ask? What would you say? What would you do? You would get different people's opinions. You'd break things down and would be quite good or how they've looked at the model itself and how they've interpreted it. (Control room Participant 3)*

4.2.8 Learning from pursuits

It was felt to be important to learn from pursuits as each one is different*:*

> *I think you learn something new every day, every single pursuit you realise what you could and couldn't have done, one pursuit you'll hear someone that's pursuing a mental health subject, the next time you pursue*

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someone like that you should be thinking should we really be pursuing them because last time they tried to kill themselves by crashing their car during a pursuit, so I think you learn from experience. (Control room Participant 5)

4.2.9 Issues around fail to stop

Control room participants felt that there was very little information provided or available about pursuits that have started from a 'fail to stop' offence:

Most of the pursuits we have we don't know what the vehicle has been concerned with when it fails to stop. We've got no way of finding that out unless there is prior intelligence to say that this vehicle was used in a robbery yesterday. Most of the pursuits just start off with somebody failing to stop and there may not be sufficient evidence relating to that vehicle to say well it actually was concerning a burglary yesterday. It could be that the vehicle's just been stolen or used to kill somebody, but none of that has been reported yet. (Control room Participant 2)

4.2.10 Motorbikes, mopeds and scooters

Control room staff raised the issue of an increase in two wheeled crime and attributed this to a perceived 'no pursuit' policy amongst the perpetrators**:**

Of course, that was all publicised and put on the telly, and so the kids all picked up ha, ha, ha, if we take our crash helmets off, the police won't pursue us, and we can go around and rob London blind. We've had to take that into consideration and the level of the offence and how do we proceed. (Control room Participant 4)

The issue of two-wheel crimes was perceived as one that affected public confidence in the police but were also fraught in terms of risk:

I do think motorcycles are riskier, but we need to effect public confidence and we can't just have someone come along nicking and riding up on a pavement and then driving off and the police can't do anything about it because they're too worried about what's going to happen if they get involved in a pursuit and it goes wrong. That will affect public confidence straightaway, (Control room Participant 5)

4.2.11 Need to raise public awareness

Participants felt that public awareness needed to be raised about their responsibility to stop if requested and the consequences in terms of personal harm if they don't:

Need to explain to the public if you're driving a vehicle or riding a bike and you fail to stop, the consequences are on you. That may seem very idealistic, but it's something as I say, my concern is for what happens once we stop a pursuit, if some, God forbid, we stop a pursuit, or I stopped a pursuit, and then found out that 3 miles down the road he crashed into a bus stop and killed 3 people, then I would feel a lot guiltier personally about that than if we stopped him and he unfortunately died. He's got the choice to stop and I don't think the public appreciate that. That's what I'm saying. (Control room Participant 2)

The media were felt to vilify the police when things went wrong:

So I'd like the public and the press to have a bit more understanding about what we are dealing with …All I would say is that society want police to pursue people in cars, if they don't stop in cars because they might be committing a crime, do they want the police to let them get away, and obviously this has been in the media and in Parliament recently about these moped riders, are the police doing enough? I think society, in general, do want the police to do something about these people that don't stop in their cars, and I think they accept the risk because it's a question of fighting crime and catching offenders, you can't just let people drive away from the police and they do nothing about it. That's what society in general, the majority, want and when some criminal dies on his scooter or in his car, or whatever, it's very sad, but because he didn't stop for the

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police when he was committing a crime, it's his fault, it's not the fault of the police. They're just doing their job. (Control room Participant 6)

4.2.12 Dynamic between control room and driver/operators

Control room participants raised the issue of tension between them and the driver if they did not authorise a pursuit, this was couched in terms of a failure of the driver to provide evidence that a pursuit was required:

The officers don't like our decision. I will say, no, I'm not authorising this and then you get a bit of argument on the radio, oh well, we think that's the wrong decision. You can think all you like, but if you haven't got anything concrete, you're not selling this to us and it's not going to happen. (Control room Participant 4)

One participant described the dynamic between the drivers and the control room as strained because a driver's judgement may be 'clouded by the incident or intensity of it' and they needed to listen more:

Most of the time the person authorising the pursuit is police staff and they are not police officers. The police officer is more determined to catch the offender than the police staff. The police staff are just doing their job without the same motivation and they're more worried about not getting in trouble for the pursuit, whereas a police officer, is more concerned about doing his job and detaining the suspect, so there is a divergence of priorities there, and that for me, is the main issue and I've been involved in pursuits where I've thought that it would be reasonable to use a tactic to stop the vehicle, the officer has thought that, but the police staff supervisor said no, it's a bit of a busy road, we'll terminate it, so that is the main issue for me. (Control room Participant 6)

4.3 TAC Advisors

4.3.1 Whether to pursue or not

TAC advisors had some mixed views about whether a pursuit was a proportionate response with several of the TAC advisors feeling that drivers were too quick to pursue and not enough was done to get the required intelligence in order to look at pre-emptive tactics to avoid a pursuit in the first instance whereas others felt the driver should be trusted:

If the driver feels justified in pursuing that vehicle, then I would weigh their experience and their judgement higher than something that was presented to me from somewhere else (TAC advisor Participant 2)

4.3.2 Fail to stop

There were quite mixed views amongst staff around getting information about why a vehicle failed to stop in the first place. TAC advisors (normally police pursuit trained) were more likely to feel that a pursuit should be authorised on the grounds of fail to stop whereas other staff were much more circumspect:

If it's a simple fail to stop, I think we should still try to stop them and chase them, I don't think we should just terminate the pursuit simply because someone's failed to stop because that gives them 'carte blanche' to go and do whatever they like (TAC advisor Participant 1)

It was also felt that in relation to two wheeled crime it was important to pursue because often it would not be possible to get further information on them because the vehicles were stolen or being ridden on false plates:

Why are they failing to stop? Well, when it comes to motorcycles and mopeds quite often they're stolen and I'm sure you've read in the papers about the high volume of robbery, crime that's been happening on scooters where they either hide the number plate or take the number plates off, and quite often I would say a good 50 to 60% of those motorcycles are stolen and they'll go out, commit the crimes, dump the bike and go and get another one (TAC advisor Participant 5)

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Others felt that it was firstly Important to' fathom out' why the vehicle had failed to stop and needed as much information as possible from the driver/operator:

> *We need as much information from the driver or the operator that is pursuing the vehicle as to why they've requested the vehicle to stop, the reasons behind why they feel the vehicle's failing to stop and then with the intel package, generally the drivers and operators, won't necessarily have the information there and then whilst they're pursuing the vehicle, it could be a PNC check that comes up with no insurance, and then – intelligence checks. (TAC advisor Participant 4)*

Another participant felt that drivers reacted too quickly, without considering pre-emptive tactics or requesting further information and this generated many unnecessary pursuits:

> *Participant: What people are doing is just that they're switching the blue lights on and then they're surprised when people don't stop, whereas actually if you've done a few more checks, we can use pre-emptive tactics and we can prevent a pursuit in the first place. If we have 500 pursuits per month which we do, then I would say at least 300 of those could be avoided.*
> *Interviewer: 300 out of 500?*
> *Participant: Yeah. A lot of the pursuits we have is where a police officer has got behind a car, they suspect that the driver is disqualified, they suspect that he's drunk or whatever it might be, and rather than coming to the pursuit channel requesting assistance, pre-emptive tactics is where you use advice to reinforce and stop the car before it has a chance to make off, they are just putting the blue lights on and get a pursuit out of it. This has always been happening, it's been going on for years which is why a TAC advisor has been put in place to try and change thinking.*
> *(TAC Advisor Participant 2)*

4.3.3 Control room and driver dynamic

A number of areas of tension between the control room and driver/operators were identified which participants felt affected both the authorisation and termination of pursuits. It was felt that the process of authorisation was 'a mess' due to lack of pursuit trained staff in the control room:

> *…most of them are civilians, so they're not police officers and haven't got an operational background, but they're not trained in or understand pursuit policy. The control staff get defensive about people using the pursuit channel because they think it's their own channel, whereas it's a channel that's there to be used by all officers and it should be a support channel for officers on the ground, but for authorisations, are a nightmare because you have different interpretations of policy through different supervisors [*in the control room*], you have us in there who are operational police officers that are trained in driving and in pursuit tactics and have become experts at the policies, so we know exactly what's going on (TAC advisor Participant 2)*

One participant reported that there would often be disagreement in the control room on whether to authorise or terminate a pursuit and their own advice would not always be considered:

> *There will be a fair few disagreements between myself as a TAC ad [advisor] and pursuit driver and the decision that particular a SI* [the SI is the pan London supervisor] *has made. Ultimately, it's the SI's decision whether they want that pursuit to continue and I can show my opinion on it via the various options, but that's a rare situation for me personally. (TAC advisor Participant 3)*

Issues were raised on finding out whether the drivers were qualified to pursue:

> *The classification of the driver that is pursuing which is very much a bit of a 'hot potato' because quite often, we find ourselves with people that are what I would say probably acting in good faith and thinking they're doing the right thing, when actually they don't have the qualification, and I think that's where it comes unstuck with pursuits if anything does go wrong, and the proverbial hits the fan, it's down to them really. Potentially it's a job loser and I don't ever want to be in that position (TAC advisor Participant 5)*

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Other participants described the pressure that the control room put on the drivers/operators as being excessive:

> *They ask a lot of questions, from where I sit in the car and in the control room, it feels to me like they're trying to bully questions out of people that are sat in a car who are trying to pursue someone, and they start putting them under loads of pressure asking questions and threatening to terminate the pursuit if they don't get an answer immediately and then terminating it very, very quickly as well. (TPAC driver Participant 1)*

The role of TAC advisor was seen as a useful addition to the control room to help support decisions with intelligence:

> *When a police driver is behind a vehicle, it's very spontaneous, it's quick thinking, they are pursuing that vehicle with very little intel or knowledge, whereas where I am, I've got the facility to do lots of intel checks, lots of background checks, I can look at maps, I can then also apply the policy, I can pass my knowledge and my experience onto the driver that's currently pursuing in order for them to bring that pursuit to a satisfactory resolution (TAC advisor Participant 4)*

4.3.4 Information communication

There was a consensus amongst participants of the importance of having clear communication of information from the drivers/operators in order to assess the risk:

> *If we don't have communication we can't assess the pursuit that's going on, so that is one of the biggest key things, on the radio we need to have clear and concise information coming through to the control room, but also we need to pass clear and concise information back to the police vehicle, and if that communication is broken, we need to terminate the pursuit as we can't pursue it because we can't manage it properly (TAC advisor Participant 4)*

Participants mentioned that the experienced operator was vital to get the right information:

> *If you don't have an experienced operator, then you're pretty much on your own because they won't have the experience or training to effectively communicate in a pursuit. You could tell them what to say, but it's not easy when it's the first time they're in a pursuit and will be a bit overwhelmed by what's going on. (TPAC driver Participant 2)*

4.3.5 The role of the NDM

Participants described the NDM as being engrained in the way they operate and helpful in providing an objective way of making decisions:

> *I suppose it encourages us to continue evolving our decisions and rationalising what we're going to do and seeing if there is an alternative option. (TPAC driver Participant 1)*

4.3.6 Learning from pursuits

Participants felt that they rarely captured what they learned from pursuits (unless something had gone wrong causing death or injury) and there was minimal evaluation which they felt needed to change:

> *It's something that needs to be changed because I feel that after a pursuit has happened, we should be debriefing the drivers. I feel that the vehicles should be looked at to make sure what the police have done has been done appropriately and correctly in line with policy and the NDM. (TAC driver Participant 4)*

4.3.7 Training

Participants felt pursuit safety could be improved by the training of control staff and by increasing the number of police in the control room:

> *I think as well having actual police officers in the actual control room managing the pursuit channel because at the moment we have civilians who generally aren't trained in the tactics, not fully understanding of police legislation, law and the main justification really, so I would say the best way to improve it would be to have*

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> *police officers monitoring the radio channels and making most of the decision making. ……. (TAC Advisor Participant 4)*

Also, there should be more training of drivers and operators to think more about pre-emptive tactics:

> *I think they need a bit more information with regards to pre-emptive tactics and just think more pre-emptively as opposed to seeing a vehicle and then activating all the blue lights and sirens and then engaging in a pursuit …those that are on the channel speaking to the drivers, I think it should be more a police officer role and I think those that are in that position should be trained in the tactics or have experience in it as opposed to just having civilians that aren't trained and don't know these powers and procedures, etc. (TAC Advisor Participant 4)*

4.3.8 Red mist

Control staff were aware of the problem of a driver experiencing red mist and the motivations behind it. Staff felt they could detect it and tried to manage it or would terminate a pursuit as a result:

> *[You can] hear that in the voice of the operator, i.e. they're screaming, or too panicky or it could be that through the transmissions we're hearing shouting or we're hearing something in the background that we're not happy with, then we can say that driver is getting too drawn in to it, we need to terminate for the safety of the officers, the safety of the public and the vehicle being pursued. (TAC Advisor Participant 4)*

4.3.9 Air support

Air support was generally viewed favourably because it took the pressure of the pursuit and provides an 'eye' in the sky in order to judge risk:

> *It paints a better picture than someone shouting on the radio or trying to explain what's going on. It almost slows everything down for us…. takes the pressure off everybody. The control room staff are a lot better knowing that the vehicle is less likely to be lost because they've got an eye in the sky. The pursuing driver now knows that even if he loses sight of that vehicle, there is somebody above looking down. It takes the pressure off the driver pursuing. (TAC advisor Participant 3)*

However, one participant described it as annoying because they felt the police in the pursuit were best positioned to judge risk:

> *… they will take over the commentary which becomes annoying because they radio hog and can't get a word in edgeways, also they're a lot further away from the subject vehicle that's in the pursuit and it's the police car that's best positioned (TAC Advisor Participant 2)*

4.3.10 The role of the public

One participant commented on the important role of the public providing information which can then be taken into account in their decision-making:

> *…our intelligence can come from multiple calls from the public. A recent one that I dealt with was …motorcycles all with 2 passengers on, armed with knives and machetes, no number plates displayed and riding from the north of London down into central London and we were receiving multiple phone calls in relation to these ..motorcycles. Having no prior knowledge or intel regarding it, the fact that multiple members of the public are calling in and as they're calling in we can plot the route as to where they're going, and as it so happened, they actually did a smash and grab in Oxford Street, so as that intel is coming in, I'm then getting the TPAC resources together and any stinger device trained units together to try and head ahead of this group in order to put some tactics in place to locate them and prevent them escaping and continuing. (TAC advisor Participant 4)*

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5 Strategic Stakeholders

5.1 Views on the NDM

One stakeholder believed that whilst NDM was useful it was being used by investigatory bodies to hold the police to account and the level of analysis was unrealistic and problematic:

> *…for example, an investigatory body may view CCTV or other video evidence and do a frame by frame analysis of a pursuit asking what is your thought process here, here and here, and realistically a vehicle has struggled for 10 feet, so it is the interpretation of the model as opposed to the model itself I think is the problem it's an impossible question to answer. (Stakeholder 1)*

It was felt that this could have a deterrent effect on undertaking pursuits:

> *I think it's had a detrimental effect on pursuits because people are less likely to pursue, if they know they're going to be scrutinised each, or several parts of a second they're going to be scrutinised, it has a knock-on effect in terms of the investigation, the timescales involved in it, and is probably a deterrent to people actually pursuing, so I don't think it's the NDM as the problem, I think it's the process that follows after it.* (Stakeholder 1)

This was also felt to cause problems because most people on the external investigatory bodies would have no experience of driving:

> *Then you have external investigatory bodies who have little or no experience of driving, driving at speed, pursuits, investigations, and as such they have an inability to apply a practical knowledge to their interpretation because they don't have that experience, so how can they apply practical knowledge? (Stakeholder 1)*

With another participant also feeling that it was 'not necessarily appropriate in the most dynamic or fast-moving situations' (Stakeholder 2) because:

> *That decision has got to be made instantaneously and the ability to make the right decision in those circumstances only comes, a, with a good understanding of the NDM, but, b, experience. Somebody new to the model isn't going to be thinking quickly enough to be able to apply it in its fullest in that split second.*

It was felt that the NDM was not well understood by the 'rank and file' of the operational police officers within the MET' (Stakeholder 2).

Other stakeholders felt that the NDM had really helped especially in getting people to minimise the risk of starting a pursuit in the first place but also it was not something that was useful whilst a pursuit was being undertaken:

> *I think the largest reason the National Decision Model is a common-sense framework which has just been more formalised. … I think it's more formalised now and I have to say it has been a big change in people's minds because the danger is you feel it's a challenge, if that makes sense, as a driver not to lose its person and I think we have moved away from that a lot now to say, you know what, this person is now driving to a point where I think they might crash at some point, so therefore, it's not serious enough for me to keep going, they'll come another day and we'll stop this one now and we'll find them another way. …. I think the biggest thing is in the pre-pursuit side of things…. I think that is a change which is occurring to try and minimise the risk of having a pursuit in the first place (Stakeholder 3)*

> *I think the NDM in terms of pursuits, for those in the vehicle I think it's the wrong tool to expect to those in the vehicle to follow. I think from my experience in the NDM it's fantastic at slower time decisions or those with the ability to step back and have a perspective on decisions. Those in fast time decision making processes will follow a natural in-built process themselves, but not necessarily in the formalities in the NDM,*

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so I think from those on the periphery of a pursuit to the tactical advisor, those that authorise certain tactics, I think it's a great piece of kit. I think having been in pretty dynamic decision-making roles myself, I can say I wouldn't be following the NDM and I don't think most police drivers do either and having done various training courses myself with driving, I'm not aware of ever really being taught it in any great detail especially in how to apply it to driving… I would probably take quite a radical approach and say I don't think we should be doing it at all. When you look at a lot of statistics that are produced around pursuits, I think the MET police attributes that only 4% of pursuits result in successful outcomes, now if you're looking at that as a successful outcome, and the risks involved in every one of those pursuits, you've got to ask yourself is it worth it…….(Stakeholder 4)

I don't think in a pursuit situation you can go around the NDM as comprehensively as possibly our doctrine expects them to…..The decision-making in a pursuit situation by the person that's either the ground commander is just so fast, they're almost instinctive, so I think you're in the territory of sub-conscious competence, so what you need is you need officers to be trained and practiced to a level where actually their decision-making becomes unconscious rather than conscious……in very simple terms, is it makes you assess what the threats and risks are and makes you consider the options, and therefore, if the risk benefit isn't made out you're going to abort the pursuit. Similarly, it's helped justify us pursuing when it's quite high risk and the perception might be you should abort, but actually we don't, and you have something to fall back on which is the NDM…. (Stakeholder 5)

I would think they would use the phrase a dynamic risk assessment and a continuous risk assessment more than they would say that they were using the NDM… (Stakeholder 6)

5.2 The role of TAC advisors

TAC advisors were seen as a great asset for managing the safety of pursuits:

Interviewer: Do you think that having the TPAC advisors is helpful in the control room?
Participant: Yes, absolutely because they are trained, they're experienced, they generally have a pan London unit, they will have a greater level of knowledge of the whole of London, not always, but they will be able to relate to what the officers on the ground are thinking, or at least should be thinking, because they've been there and done it themselves, and it's that ability to relate to what is going on, I think it's extremely valuable, so yes, I value the assessors in there in the control room. (Stakeholder 1)

…those in the control room have the ability to just look at the hard facts of what they're presented with, and there is clearly going to be that difference between perspectives. You could argue the one in the control one almost holds the 'what would the public expect us to do now' kind of thing and take a step back, but I think, yeah, I agree, I think the perspectives are very different between the driver and the potential person supervising the pursuit, or in a tactical authorisation position (Stakeholder 4)

5.3 Air support

Air support was viewed as an asset in managing the safety of pursuits though it was acknowledged that this was becoming a scarce resource:

Air support is crucial. The faster the helicopter can get above or whatever mechanism they use, the faster it can get out, the quicker its deployed, the quicker the other officers can withdraw from the scene and the pursuit can be managed much more effectively because you reduce the number of people directly involved in it, and therefore it becomes safer, so yes, air support I think is crucial. (Stakeholder1)

The national police air service is struggling I would say to deliver the user requirement for the management of pursuits. …. the availability of a helicopter is less and less. (Stakeholder 5).

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5.4 Management of red mist

One participant described there being 'layers of protection' against drivers being 'sucked in' or experiencing red mist:

> *All of our cars are double-crewed, so even if the driver is suffering with the red mist, you have your back-up with the passenger in the vehicle and you also have your pursuit commander to your TAC advisor to be advising as well, so you have layers of protection to ensure that if red mist does appear to be rising, then you have 2 levels of protection to either call off the pursuit or to lower it, or to prevent it in the first place.(Stakeholder 1)*

> *The way to manage it is to simply stop, but it's recognising that you're in that zone if you like and it has become a personal challenge, and this where actually, having someone detached in the control room, is useful especially if they're trained because they can be hearing all the commentary and it might start to get exciting or it might start to sound angry, or anything like that and they can say, and a line that's used quite a lot, do you still feel it's safe to continue to pursue? That is a bit of a wake-up call to say, hang on, someone's questioning me, and it might be, yes, I do, but equally it might be that it's a good point, yeah, he's getting faster now, we'll terminate. (Stakeholder 3)*

5.5 The role of the operator

Most stakeholders, like the drivers we interviewed felt that the operator was the weak link in the pursuit and more training was required**:**

> *In an ideal world the operator should be as equally trained as the driver. Unfortunately, with budget constraints and things like that, training is one of the first things that takes a hit, so the amount of trained drivers is, I think, is insufficient and the lack of training for non-drivers, so you can have a situation where the passenger is a non-pursuit driver, I think they need to be given training to enable them to be able to deal with a pursuit, all too common, are just dumped in the front seat of a car and expected to get on with it with little or no training (Stakeholder 1)*

> *The operator, I don't think, and I may be wrong here, but I don't think that radio operators are given any input now in to how to communicate during a pursuit, and if you consider that the control room supervisor the only information that they get is verbal information via the radio from that individual, their decision will only be as good as the information that they're getting and I don't think that's fair necessarily on operators because to be an operator you don't have to be a police driver, you don't necessarily have to have been in a pursuit ever before…… we've put an awful lot of emphasis on driver training which is absolutely right, but I think we dropped the ball on operator training…….. As soon as a pursuit comes up on the radio you can tell whether that operator has got experience of doing that or not, just through the way they communicate. The tone of their voice, the volume, the information, the information is very clear from quite soon on whether they're an experienced operator or not, and I don't think that's fair on them. (Stakeholder 2)*

5.6 Training

Stakeholders generally felt that training was minimal with the consequence that police struggled to keep up with policy change and that this was the consequence of a lack of resources**:**

> *There are no training days or minimal training days built into shift patterns and rotas, and having a training day, a monthly training day or even a quarterly one where appropriate updates can be delivered on a face to face basis because all of the other pressures on police officers in relation to keeping up to date with all aspects, and it's not just pursuit management, it's all aspects of policing (Stakeholder 1)*

Another participant felt there was too much reliance on e-learning:

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> *The job relies far too much on e-learning, you know, I'm a trainer as well and one of the most important aspects of learning is assessment, you have to go back and make sure that the person has understood what you've been teaching them and e-learning doesn't do that (Stakeholder 2)*

It was felt to be important to refresh driver's skills with advanced driver professional development:

> *We do a pursuit with them, so we can see if they're still driving in an appropriate fashion, if they're locked onto the subject, their vision is dropping to the subject which obviously causes more risk to the police car itself. We can look at how they assess risk of what the subject vehicle is doing…… unfortunately people don't appreciate the skill it takes, a) to instruct; and b) to be out there in London driving around on blue lights and things. (Stakeholder 3)*

One participant noted that there was in fact no standardisation of advanced training:

> *One gripe I have if you like is the advanced car course in London looks different to the advanced car course in West Midlands or Devon or somewhere like that. I hope one day they might all look the same, but of course different people have their different issues if you like. (Stakeholder 3)*

5.7 Views on a non-pursuit policy

Stakeholders were asked about whether the police should adopt a non-pursuit policy. Most participants felt that this would not be effective and would increase crime rates. One participant noted that this could affect crime levels as the situation with two wheeled vehicles had shown:

> *We used to traditionally have a policy of not pursuing two-wheeled vehicles in London and we now have something along the lines of the Wild West with two-wheeled vehicles because it was taken as a green light for criminals to use two-wheeled vehicles knowing that they wouldn't be pursued. So I think that a no pursuit policy would be a mistake. Whilst we would have less pursuits and therefore less damage, injuries, fatalities as a result of less pursuits, you would end up with …a significant issue with drugs, alcohol, contravention of road traffic legislation all over the place, and criminality, so ultimately it would be a mistake. (Stakeholder 1)*

> *I don't think a no pursuit policy would be effective. I think in certain circumstances we have to pursue people. (Stakeholder 2)*

> *I would be shocked if anyone you had spoken to said that crime would go down, you know, the British public and I include the criminal networks within that, are well aware of the restrictions on policing, in this country we police by consent, and we are still one of the most highly respected and restricted in terms of force, police forces in the world…….and I think they would exploit that very quickly for all sorts of purposes, whether it was stealing vehicles or whatever, so no, I think that would be a bad idea and it would be exploited and I suspect the crime rate would go up. I challenge an academic to prove me otherwise. (Stakeholder 2)*

> *I think that's very dangerous to be honest because I think as soon as you do that then it's open season, people can just know that they will never get chased. (Stakeholder 3)*

> *…. in my view, there is no doubt that the spike in motorcycle and moped crime happened in London because they knew they couldn't be pursued. When we turned that around and when we turned that around with the MET, by a, giving them the NPCC endorsement, go and pursue, and b, gave them the tactics to pursue, c, gave them the vehicles to pursue, motorcycle and moped crime in London is actually coming down now….. if you stop pursuing the criminals feel they have a free reign and crime goes up. (Stakeholder 5)*

> *As a tax-payer and as an expert in this field, I want the police to be operationally effective and if that means that they need to pursue criminals to arrest them, then as long as it's done safely and with the minimum risk to themselves, the subjects and the public, then I want the police to arrest criminals……..I think it may influence a rise in the criminal activity that's being addressed by patrolling offices, road policing officers and armed response vehicles that are undertaking some of the travelling criminal activity that we are seeing at*

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> *the moment…….if people feel like they're not being pursued in any way, then it may well be that they lose the respect for the law and commit more offences. Maybe. I think more people will commit offences, it might be that the people that would commit offences in any case, may commit more offences. (Stakeholder 6)*

However, there was one 'outlier' participant who reflected that pursuits were not a very effective strategy and that 'smarter' ways needed to be found to tackle crime:

> *To me that it's a very regular tactic that is used an awful lot to very little positive outcome and I would say a positive outcome is someone pulling over and being arrested for an offence. …..I think if we had a no pursuit policy, if we changed it to effectively an evidence gathering policy, you know, let's pursue our distance, let's invest in more helicopters and drones, let's follow at a distance, let's follow at an altitude, let's be way behind that car I think we could be an awful lot smarter about how we tackle crime then just blanketly pursuing people that have potentially done no good. ……. . (Stakeholder 4)*

5.8 Non pursuit trial

Participants were asked on their views of trialling a non-pursuit policy in one of London boroughs. Moreover, there were mixed responses. Those against it felt that if it was done in a single borough criminals would try and escape to the non-pursuit borough:

> *I think it would be disastrous and I think the perception of the criminal fraternity would be that it wouldn't just be a trial in that particular area, it would be I think something along the lines of in the United States where they had their state boundaries and you used to make a run for the state line, I think if you engaged in criminal behaviour in one borough where it neighboured onto a borough where there was no pursuit policy, what would you do if you then crossed over the boundary, you've committed a crime and the pursuit would have stop at the boundary line which seems ridiculous (Stakeholder 1)*

One participant felt that it had ostensibly been trialled already as the rise in crime associated with two wheelers was felt to be a direct result of a perceived non- pursuit policy:

> *I think in a sense we almost have already, and I say that because of the moped issue, so for a while we steered away from chasing mopeds and in fact even now, there are only very limited numbers of officers who are allowed to chase moped….. this is why the moped problem has become an issue because they know they're not really going to get pursued (Stakeholder 3)*

Other participants showed a level of interest in such an idea, or anything that would increase the safety of pursuits though with some wariness about the public being aware of such a trial:

> *A trial! I would be interested to see the results. I am not convinced at a single London borough would be an effective enough sample size because some of the London boroughs are so ……As a concept, the idea of trialling a non-pursuit policy I think would be really interesting. I'm not sure that the results would necessarily lend towards a permanent ban because the criminal networks do learn when we change policies or laws*
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> *…. if this is not made public, I would be very supportive, and I would be very supportive to see if it would be a success or not. I think you'd probably have to find a borough with a very high collision and injury rate in pursuits (Stakeholder 4)*

Other participants suggested there needed to be a balanced approach to the risks it would reduce and those it would raise:

> *would reduce risk in the short-term, the risk of pursuits on the road, but it would increase other risks in the longer-term, so how would you properly assess that adverse impact in the longer-term? That's what I would be nervous about. Why not just go and see somewhere where they don't pursue and do an evaluation there? Do a comparative study rather than a trial is probably what I would say (Stakeholder 5)*

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…. If there is a manner in which, and that can be done more safely and with less risk to the officers and public, then yeah, that would be something that I would be interested in. I don't know that a blanket no pursuit policy would address both those issues…I would sit at the table and speak to anyone who was looking to implement a process that reduced the risk across the spectrum of people within that borough, and if that involved a no pursuit policy and the greater use of other tactics then yes, I think that would be something very much worth talking about. (Stakeholder 6)

5.9 Public confidence

Stakeholders were asked their views of how the safety of pursuits affected public confidence in police work. Participants felt there was a difficult balance in being perceived to do something about crime but also to ensure this was done safely:

There is a significant amount of media attention and criticism of policing when we didn't chase two-wheeled vehicles, and as a result, increasing levels of violence is being used from people who steal two-wheeled vehicles and they go and commit further crimes on them, and the public confidence is knocked as a result of that. Of course, if somebody is injured or killed, then it's bound to knock public confidence, but generally it's the people who are linked to those that die, and more often than not they are suspects as opposed to innocent people that get injured or killed (Stakeholder 1)

Where someone's been seriously injured or killed or something like that, and obviously that's a bad thing, it needs to be reported on, but I think that tends to knock public confidence. I think if the public knew how many pursuits there were and how many were positively resolved, they might be surprised…. we could do more, not only to increase public awareness, but to try and improve public confidence in what we're doing (Stakeholder 2)

I think people are wanting to see that now because they are so fed up of these people riding around on bikes robbing everyone, that's what they want, and I think to a point, we need to do more on that in London because I think people have lost some confidence in our ability to deal with that, but at the same time, if one of those mopeds knocks over your granny, you're going to say, why aren't the police chasing? So, you almost can't win (Stakeholder 3)

I think there is a lot of support for police work generally and I think pursuits are no different to that. My perception, is the public are quite positive of what police do and I think they're quite supportive until at such time that they are involved usually quite innocently in the horrendous aftermath (Stakeholder 4)

Interviewer: To what extent do you think public confidence is affected by pursuits?
Participant: Massively, I mean there's been a lot in the papers and the politicians have suddenly woken up to it which is why the Home Office are now doing a review around legal protection, but I think the public particularly in this country, have massive confidence in the police's capabilities and when they get an indication that there's a capability that the police no longer have, I think it really worries them and I think that manifests itself in some of the media reports that we're seeing, and that manifests itself and the politicians now are being much more animated around legal protection for officers (Stakeholder 5)
I think the pursuits that have been undertaken across the country, the criminals that are being arrested, people kind of know that's happening and they're happy that the police are doing that, and it's my job and other people's jobs to make sure that the times where it doesn't go right, happen less and less frequently. (Stakeholder 6)

Whilst asking about public confidence one participant talked about the confidence of the driver and that more could be done to support officer confidence too and that they should not be treated as if they were an ordinary driver taking unnecessary risks:

The law needs to be adjusted to say that an emergency services driver on an emergency call, you need to consider holistically as part of the overall investigation the fact that they had a higher skill set, and

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therefore, what they did during their driving wouldn't necessarily be the same as what you would expect a normal competent driver to display. (Stakeholder 2)

5.10 Are pursuits justified?

Most of the stakeholders we talked to felt that most pursuits were justified and the ability to pursue was a central plank of policing and if this did not occur then this would undermine the rule of law and public confidence and was never something undertaken lightly**:**

It goes back to linking with public confidence and there is an expectation of us to chase something that doesn't stop (Stakeholder 1)

Most police officers have a sound knowledge base and make good decisions, so because pursuits occur, you have to accept that those police officers are making the right decisions and therefore those pursuits should be occurring. Okay, there will be a small minority there actually for the police officer for whatever reason, whether it's red mist or just a bit of jaded judgement, has made the wrong decision and actually the pursuit is terminated, but the majority of them need to be occurring, yeah, absolutely, criminals use the road network to travel and to commit crime on and if there was a policy whereby we never pursued anybody, I can't believe they wouldn't exploit that opportunity (Stakeholder 2)

Now speaking to people, a lot of them just don't want to be involved with a pursuit because if something does goes wrong, it's their liberty on the line, their job, etc. and we've all got families to look after and things to pay for and things like that, so I think if someone has actually bothered to continue to pursue, they think there is a good reason for that. (Stakeholder 3)

The rule of law is a fundamental plank of a single democracy and if you don't pursue criminals then it undermines the rule of law and therefore undermines stability in a democratic society…We police by consent in this country and I think there is a massive consent and a massive public backing for the police to be able to pursue on the roads. (Stakeholder 5)

There's a balance between the need to apprehend the person who's committed the offence against the risk that they pose to themselves, the officers or the public……The justification for pursuits is that there is a sliding scale, I think, and that's very much what the decision-making process is about. (Stakeholder 6)

However, there was one outlier who felt that in most cases pursuits were not justified:

Interviewer: Do you think the pursuits are justified in most cases?
Participant: No, I don't they are in most cases.
Interviewer: Do you think the benefits outweigh the risks?
Participant: No. I don't think they do.
….where you read the officer's statement and you think this is quite a mild-mannered journey down the A12 and I don't know how this ended up in a big collision, and then you watch the video footage and you think you're in a different car (Stakeholder 4)

5.11 Improvements

Participants were asked about how pursuit safety could be improved. Several ideas were proposed some with the acknowledgment that there were resource constraints or that resources could be better managed.

5.11.1 Increase number of TPAC drivers

One improvement was to increase the availability of TPAC drivers who could provide more pre-emptive tactics:

…resourcing which is probably a common theme in police officers' thinking at the moment……. I've pursuits in that situation terminated because there are no TPAC resources available, so we can't go to that last

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stage putting in a tactic to stop the pursuit, and part of the reason for that is that TPAC drivers are almost exclusively part of the traffic division who also have responsibility for dealing with obstructions on the motorway network, serious or fatal accidents and all sorts of other responsibilities around London, so if you have a pile up on the M25 that draws lots of those resources away, actually your ability to manage pursuits elsewhere disappears because those resources have been taken elsewhere and it does happen. ……. we could better resource the police, provide more officers, more training, more cars, but the other thing is we could manage those TPAC resources better (Stakeholder 2)

I think we need more TPAC drivers because they have the ability to do more pre-emptive stuff and they are more highly trained in terms of other tactics as well. I am disappointed, and I appreciate it's a numbers issue, I am disappointed that skill hasn't been rolled out to all of our armed officers because we have quite a number of them out on the streets and when they're not dealing with an armed call, they could be another resource to try and bring a pursuit to a safe conclusion. We've got traffic officers that are trained and some local borough officers who are trained now, but not enough in my opinion. (Stakeholder 3)

5.11.2 Improve training of control room staff

The 'professionalisation of the pursuits pod' i.e. control room through training was also suggested:

I offered all of the people that work in the control room department the chance to come out and see what we do, not one of them came out, not one. When they do a new course for their operators and their supervisors, as part of that course they spend one day with us, so the new people get it and what they do they get to see how we pursue, how we risk assess things, how that we can travel at relatively high speeds, but to be safe, etc., it gives them a bit of confidence and they can then visualise what we're talking about as we're doing it, but none of the current staff have ever come out to see what we do which I find very disappointing. If they could professionalise that pod and have people working in that day in, day out as opposed to working on other channels and then coming back to us and dipping in, they would then have a better working knowledge of what we're doing and will almost become a team game then. I know the reason that hasn't happened yet is because they haven't got the money or the staff (Stakeholder 3).

5.11.3 Learning from other countries

One participant suggested learning from other countries how they addressed these problems:

I'd just like to see senior leaders in the organisation going off and doing some really good research on other places in the world that have these problems and coming back with how they solved them (Stakeholder 4)

5.11.4 The role of technology to pre-empt pursuits

Several participants felt technologies that exist now should have greater use such as tyre deflators but also more should be done to develop or work with technology that can remotely bring vehicles to a halt or track them via GPS to improve pre-emptive strategies:

More pre-emptive, so in as many ways as possible we should prevent pursuits happening in the first place…work on remote stopping…. car's engine management system is connected via a GPS tracker to a central control base, where you just press a button and it turns the engine off (Stakeholder 5)

The use of stinger and other things that deflate tyres. All these technologies and the lower level technologies and the more high-level technologies, vehicle tracking devices, vehicle engine inhibitors (Stakeholder 6)

The other thing, I think we need more of are stinger or stop sticks which are tyre deflation systems. I think there should be one of those in every marked police car and the officer should be trained because again, that gives us more options in terms of the tactics to try and disable the vehicle. …., but I think there are also money issues in terms of getting all the equipment that we need (Stakeholder 3)

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5.11.5 Driver training

Driver training came up with several participants. They proposed training using simulators and greater use of NDM to pre-empt pursuits:

> *I just think they need more training and they need more practice, and it doesn't have to be on the roads, I mean simulators or whatever, but you know judgement, practicing the judgements that they have to make in fast-time to get them to become unconscious competence as far as possible, but that's going to cost money because it's time and it is resources, but that would be what I would suggest (Stakeholder 5)*

> *Improvement of driver/training and the pushing forward of the NDM [to be] … a more prominent feature in the way they document post event what they were wanting to achieve,….and standardisation of driver training to a high as possible level (Stakeholder 6)*

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6 Summary and recommendations for strengthening pursuit policy

The literature shows that most pursuits occur in response to relatively minor offences and do not warrant undertaking a high-risk pursuit. Risk factors for collisions involving police vehicles during pursuits were the police driver being young, excessive speeds, violation of traffic signals and when the pursuit involved motorcyclists. Research among suspects in the US suggested they were frightened of getting caught for minor offences and would have slowed down and driven more cautiously if they had felt safe from the police.

The literature recommended that there should be a risk assessment to decide whether it is necessary to apprehend fleeing suspects and strict operating procedures for pursuits should be embedded through training. Research from one state in the US showed that a more restrictive pursuits policy limited to 'serious felons only ' did not lead to an increase in crime rates but led to 82% decrease in pursuits which arguably decreased exposure to risk of collisions and injuries, though a more robust evaluation is needed.

The evidence shows that pursuits generate crime – a significant proportion of pursued drivers get charged with offences related to the pursuit followed by unlawful use of a vehicle.

It is generally agreed in the literature that there is no single technology that can be used as a universal solution to pursuits (because of the time it takes to set up). For minor traffic offences that often trigger a pursuit it would be better to have static checkpoints and use Automatic Number Plate Rec ANPR. [2]

It is argued that good quality national and local data about pursuits is needed to produce an evidence-based pursuit policy and there is a need to improve data collection and analysis locally and nationally. Such data is needed to evaluate:

- The impact of not chasing or a more restrictive pursuit policy.
- To compare suspect behaviour before and after a change in policy or practice.
- To know the impact of increased penalties for fleeing the police.
- The cost effectiveness of tactical technologies related to pursuits such as, roadblocks, tyre deflators, and engine disablers and the use of helicopters.
- GPS systems that track stolen vehicles.

One study proposed that police forces should consider involving critical friends to help develop safe and effective pursuit policies. Such critical friends could be recruited from outside the police and be able to contribute different perspectives on pursuit policy safety.

Metropolitan and national police data on pursuits

On average (across 2016-2018), 'Criminal activity' accounted for nearly half of all reasons given for pursuits for the injury related pursuits, whilst nearly a quarter were 'fail to stop'. Most of these pursuits were authorised which probably reflects the greater incidence of the pursuits being caused by criminal activity. Of these pursuits, on average, 21% involved a motorcycle subject vehicle though in 2018 the percentage was notably high (31%). Over time, 'criminal activity' as a reason recorded for a pursuit has increased by nearly by over 10% between 2016 and 2018. Arguably, there is scope for reducing pursuits by addressing 'fail to stop' and traffic offences – but it needs to be clear what the specific reasons are behind these general categories.

The MPS data shows that their injury rate per 100 pursuits is much lower than the national average.

[2] The MPS deploys regular static stop site operations with ANPR assets

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However, it is hard to know whether this is related to a more restrictive pursuit policy or how pursuit management is configured for example, the control room supervisor seemed to take a greater role in decisions to terminate pursuits compared with the national data.

Clearly the motorcycle pursuits appear greater in London and are a growing proportion of pursuits over time and this may reflect the nature of crime in the area or policies regarding preventing crime.

The data collected by MPS is a good starting point to get a handle on the nature of pursuits. However, much could be done to streamline the dataset by having drop down menus which classify the data on pre-determined codes.[3]

Interviews

1. Understanding risk factors

There was a clear understanding about the risk factors that would increase the danger of a pursuit. Whilst there was a clear understanding of whether it was proportionate to pursue (aggravated crime, dangerous driving) many drivers acknowledged that pursuits were often spontaneous and triggered on a hunch and it has to be asked whether this is an evidence-based approach. In these circumstances seeking evidence to corroborate such suspicions proved problematic. This type of pursuit was often caused by the driver/rider failing to stop on request and leading to an offence of failing to stop. The MPS pursuit data showed that over a quarter of all pursuits were as a result of 'fail to stop'. There needs to be more information gathered from drivers about why they did not stop.

2. The fail to stop issue

The issue of the 'fail to stop' offence needs to be investigated further. This research revealed that from a control room perspective getting information from the police drivers was important to 'fathom out' the reason why the police wanted to stop the drivers in the first place. However, it was felt that this information was not always forthcoming from the driver/operator. There was also a feeling that drivers reacted too quickly, without considering pre-emptive tactics or requesting further information and this generated many unnecessary pursuits. There was also a tension within the control room where TAC advisors (normally police pursuit trained) were more likely to feel that a pursuit should be authorised on the grounds of 'fail to stop' whereas other staff were much more circumspect. These 'fail to stop' pursuits accounted for over a quarter of all pursuits in the MPS pursuit data, but it is unclear what triggered these.

3. The authorisation process

The authorisation process was perceived as difficult by the drivers because of the quality of radio communication and because of the dynamic between them and the control room and the lack of timely intelligence. Control room staff also acknowledged communication was comprised by poor sound on the radio channel which led to early termination decisions. The MPS pursuit data showed that 5% of pursuits were terminated because communications were poor. A potential solution to the radio issue would be to have better radios and a dedicated pursuit channel. Most participants felt a 'permission to talk' command would 'over complicate matters' and waste time in a highly time pressured context. The dynamic between drivers and the control room is a more complex issue. Many of the driver/operator participants expressed a 'disconnect' between patrols and the control room leading to difficulties in conveying risks and seeking authorisation which the drivers felt was in part because people in the control room were not experienced pursuit drivers which limited their understanding of making the right decision about the risk level. It was also felt that control room staff were risk averse, lacked courage and couldn't see the 'wider picture'. However, some participants thought the 'remoteness' and 'objectivity' of people in the control room was required to ensure

[3] This is currently being addressed by the introduction of Chronicle software

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the safety of pursuits. The TAC advisors (who were usually police trained to pursue) also felt that the process of authorisation was 'a mess' due to lack of pursuit trained staff in the control room, and there was a feeling that control room staff put excessive pressure on the drivers/operators. Arguably, the tense dynamic between drivers and the control room staff provides a layer of protection for pursuits because the control room staff are much more risk averse compared to the drivers. Compared to drivers, control room staff would prefer different tactical options and would not authorise a pursuit or would terminate it if they felt the justification by the driver was not acceptable - thereby protecting the driver from themselves and when the drivers judgement may be clouded by the incident or intensity of it and any adverse consequences of being involved in a pursuit. Moreover, the TAC advisors were perceived by control staff as a useful addition to the control room to help support decisions. TAC advisors had some mixed views about whether a pursuit was a proportionate responses with several of the TAC advisors feeling that drivers were too quick to pursue and not enough was done to get the required intelligence in order to look at pre-emptive tactics to avoid a pursuit in the first place whereas others felt the driver should be trusted. The MPS pursuit data show that just under a quarter of all pursuits are discontinued and in 77% of cases they were terminated by the control supervisor. Also, the MPS data showed that only 40% of all pursuits had been authorised.

4. The importance of an experienced operator

The importance of an experienced operator was a major theme that came through as a factor that affected the safety of pursuits. Drivers felt it was essential to have an operator who was also an experienced driver who understood the risks and who could provide an accurate commentary to the control room. Most of the stakeholders we interviewed, felt that the operator was the weak link in the pursuit and more training was required. There was a view that the training for operators was inadequate and this was a hindrance to managing the risk of pursuits. Control room participants said that a key task that operators need to perform well is the risk commentary so that they can make a clear assessment of risk and take this into account for their decisions on authorising or terminating a pursuit. Whilst TPAC trained drivers were considered to give good commentaries most driver/operators were described as giving poor quality risk commentaries. Clearly, when many pursuits are spontaneous and within a few seconds become highly pressured there is little time to communicate. Participants felt more should be done to train operators. There are clearly resource implications for this but given the high stress and workload of pursuits it would seem very important to have an operator with suitable experience and training on par with the driver who can communicate risks clearly and effectively and have the respect of the driver 'as equals'. It was felt that more training was required for operators to help them provide a clear risk commentary and this could be done by having to listen to live recordings of pursuits. The MPS pursuit database showed that over a quarter of pursuits were terminated because of the poor quality of the risk commentary.

5. The National Decision Model (NDM)

The National Decision Model was viewed by most participants as something that was engrained in their operational practices and worked almost at a subconscious level to shape their decision making. However, there were mixed views of the value of the NDM in managing pursuits. It was felt that the NDM could have a deterrent effect to undertaking pursuits because it gets people to think about how to minimise the risk of starting a pursuit in the first place. It was also seen as a deterrent to pursuits because post pursuit, in the event of an adverse outcome, investigatory bodies were using it to hold the police to account. However, it was felt that the level of analysis is unrealistic and problematic especially as many of those undertaking the investigation had no experience of pursuit driving. It was said to be useful post incident to provide a standardised way of assessing risks. It was not felt to be helpful once a pursuit was underway in the most dynamic or fast-moving situations. It was felt that the NDM was not well understood by the 'rank and file' of the operational police officers within the MET and more training was needed on how to use the NDM to pre-empt pursuits.[4]

[4] A document on the use of NDM within pursuits, and the role of Tactical Advisors is in the final stages of review prior to dissemination.

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6. Driver training

There was a general feeling that driver training was minimal with the consequence that police struggled to keep up with policy changes and that this was the consequence of lack of resources. It was felt that there was too much reliance on people reading emails and e-learning which did little to test the practical application of learning. It was noted that there is no standardisation of advanced training. It was felt that the safety of pursuits could be enhanced by:

- Introducing refresher drivers' skills course with advanced driver professional development[5]
- Assessing the effectiveness of operator training on how to commentate in a pursuit or analyse risk correctly (potentially using a simulator)
- To train all the team e.g. control staff and drivers involved in pursuit management to understand dynamic risk assessment from a driver's perspective and to have a better understanding of the respective roles of the people in the control room
- Train up more TPAC drivers with the acknowledgement that there is lack of resources for this
- Increase the availability of TPAC drivers who could provide more pre-emptive tactics
- More training on the NDM and especially among drivers and operators to think more about pre-emptive tactics

7. Social, emotional and motivational factors which affect risk

Many of the participants talked about a number of motivational factors which they felt could affect their ability as a driver to make rational decisions about the risks they were undertaking. Many had experienced red mist or had seen it in others. A term that was frequently used was 'being sucked in', this was not so much about red mist but a total focus or fixation on stopping the pursued. The role of the operator was also seen as important to 're-set' the driver when they appeared fixated. There needs to be more discussion on how to recognise this and the strategies used to re-set the driver. Control room staff were aware of the problem of a driver experiencing red mist and the motivations behind it and felt they could detect it and tried to manage it or would terminate a pursuit as a result. It was felt that there were 'layers of protection' against drivers being 'sucked in' or experiencing red mist. This understanding should be shared between all those involved in a pursuit.

Other motivational factors that affected a driver's fixation were talked about in terms of bravado and not wanting to lose face by losing the pursuit and letting the team down.

The potential personal repercussions (especially no legal protection) of an adverse outcome of a pursuit were top of mind for most participants and this clearly led many drivers and control room staff to be more risk averse and this became part of the decision making on whether a pursuit was a proportionate response.

There was also a strong motivation for police to be able to pursue because it was seen as a central plank of policing and if this did not occur then this would undermine the rule of law and public confidence and was never something undertaken lightly.

8. Two wheeled Crime

It was also felt that in relation to two-wheeled crime it was important to pursue because often it would not be possible to get further information on them because the vehicles were stolen or being ridden on false plates. It was also felt that these types of crimes particularly affected public confidence in the police but were also fraught in terms of risk. The MPS pursuit data showed that over third of their pursuits had involved a powered two-wheeler.

9. The role of air support in reducing risk

[5] All MPS trained drivers have refreshers every 3-5 years. TPAC drivers have refreshers every 2 years.

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Air support was viewed extremely positively by participants because it could take pressure off the drivers and gave a 'heads up' or 'eye' of the prevailing conditions which could affect the risks involved in a pursuit. The MPS pursuit data showed that the helicopter was only mobilised in 17% of the pursuits.

10. Learning from pursuits

Participants felt that they rarely captured what they learned from pursuits (unless something had gone wrong causing death or injury) and there was minimal evaluation which they felt needed to change. It was also suggested that more could be done to learn from other countries on the problems they faced and how they addressed them. However, the acceptability and generalisability of international approaches would need to be fully assessed.

11. Need to raise public awareness

It was felt that the safety of pursuits affected public confidence in their work, but it was difficult to balance being perceived to do something about crime but also to ensure this is done safely. It was felt that the media did not help as they seemed to vilify the police when things went wrong. The public were also seen as a resource who could provide real time information which can then be considered in their decision-making.

12. Views on a non-pursuit policy and a non-pursuit trial

Most of the stakeholder participants felt a non-pursuit policy would not be effective and would increase crime rates. The case of perceived non pursuit of two-wheelers was given as an example of crime rates involving two wheels going up when the offenders felt they were unlikely to be chased. Only one person we spoke to felt that pursuits were not a very effective strategy and that 'smarter' ways needed to be found to tackle crime.

Moreover, there were mixed responses to the idea of trialling a non-pursuit policy in one of the London boroughs. Those against it felt that if it was done in a single borough, criminals would try and escape to the non-pursuit borough.

Other participants showed a level of interest in such an idea, or anything that would increase the safety of pursuits though with some wariness about the public being aware of such a trial and that there would need to be careful consideration of the risks it would reduce and those it would raise.

13. The role of technology to pre-empt pursuits

A number of participants felt technologies that exist now should have greater use such as tyre deflators but also more should be done to develop or work with technology that can remotely bring vehicles to a halt or track them via GPS to improve pre-emptive strategies.

The qualitative research findings are summarised in terms of factors that can potentially increase the risk of a pursuit (Figure 4) and those which can potentially reduce risk (Figure 5):

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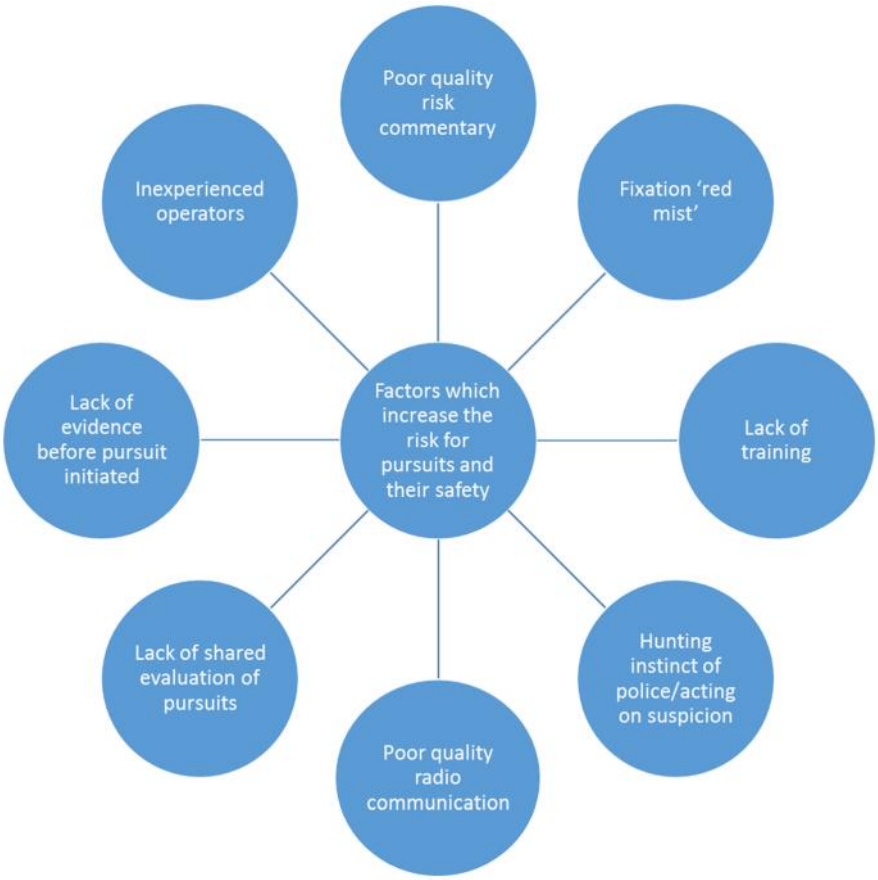

Figure 4 Factors that can potentially increase the risk of pursuits

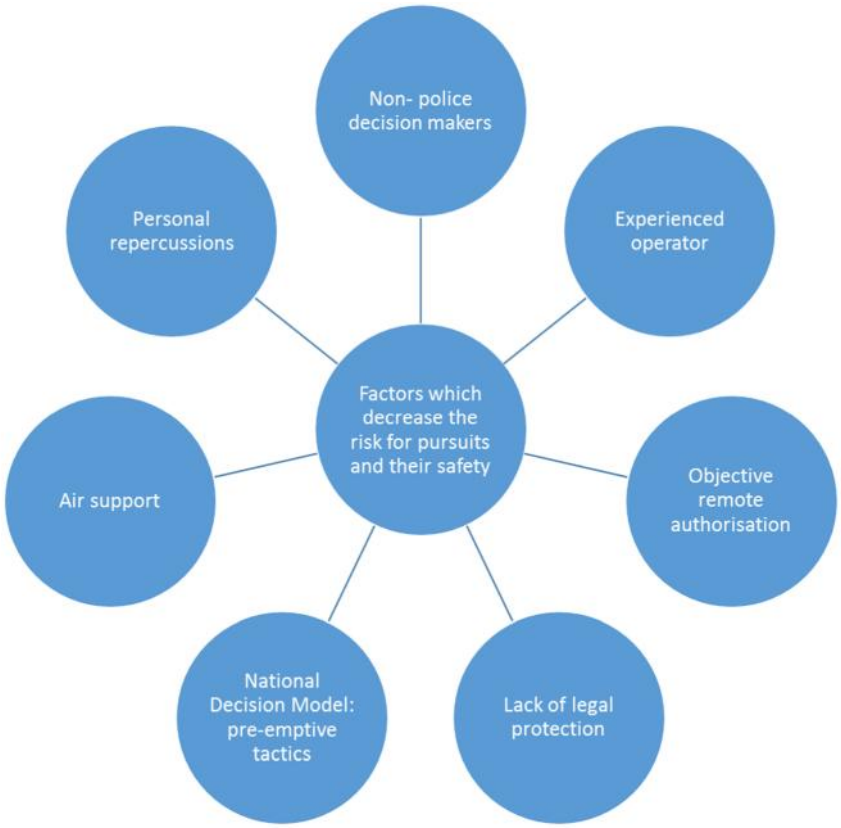

Figure 5 Factors that can potentially reduce the risk of pursuits

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Recommendations

Based on this research the following recommendations are proposed:

Data

- The MPS pursuit data is a good monitoring tool but needs streamlining and clearer explanations of the reasons why pursuits occur in the first place especially regarding 'fail to stop' pursuits.
- The high number of self-authorised pursuits recorded in the MPS data compared to national data needs more exploration to understand the reasons why police do not seek authorisation.
- More needs to be understood about why few pursuits end in a successful outcome.

Strategy

- Few pursuits end in apprehending the suspect, therefore the focus should be on pre-emptive strategies which reduce the spontaneous occurrence of pursuits. This could be done by increasing the availability of TPAC drivers, more training on the NDM and by encouraging drivers and operators to think more about pre-emptive tactics.

Training

- Team training days should be regularly organised to understand respective roles and responsibilities and to share data and insights on pursuits.
- The current training for operators to provide clear and accurate risk commentaries should be reviewed to assess its effectiveness.
- Refresher training for drivers should be in line with the refresher training for other operations which can involve lethal force such as firearms.
- There should be continual learning from other countries which have similar problems to understand how they have addressed them to improve police pursuit policy

Technology

- The poor quality of radio communications need to be addressed as this could affect decision making on pursuit authorisation and termination.
- Technologies that track or immobilise a vehicle and curtail a pursuit need to be more widely available.

Awareness campaigns

- A public awareness campaign could be run to raise awareness of the 'failure to stop' offence.

8. Acknowledgements

The author would like to acknowledge the support of Tristian Knight and Rich Lang for their support and advice and all the staff from the MPS that were interviewed to support this research. I would to thank Further Afield for their excellent field work. Finally, I would like to thank the Road Safety Trust for funding this research and the Trustees and grant managers for their useful comments.

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Appendix A: topic guides

Topic guide: drivers and operators

Improving the safety of pursuits and how the national decision model is helping or hindering risk assessment

The role of information and intelligence in deciding to pursue

1. What information/intelligence is important for you to assess risks and decide to pursue or not?
2. (prompts)
    a. Nature of incident
    b. Type of vehicle
    c. Identity of criminal known
    d. Seriousness of offence
    e. Whether a juvenile
    f. The likely route - in respect of the time of day, road, weather, traffic, specific considerations such as schools, licensed premises or off-road terrain
3. What would you say is the most important reason to pursue?
4. Under what circumstances do you think a pursuit is a proportionate response?
5. Is the intelligence always available about the nature of a crime, particularly its seriousness in order for you to judge whether a pursuit is the proportionate response?
6. What aspects of intelligence do you take into account?
    a. How do you judge the weight of intelligence?
7. To what extent do you feel you have reasonable information or intelligence to indicate that using alternative tactics is preferable to a pursuit?

Authorisation

1. What issues are there around the authorisation of a pursuit?
2. Do you feel you have timely authorisation of a pursuit from the control room?
    a. Why is this?
3. How could the process of authorisation be improved?
4. How often do you use the words permission to continue from the control room?

Dynamic risk assessment

5. The risks can change during a pursuit, to what extent do changes get reported to the control room?
6. Do you feel you get enough time to talk on the radio with control room?
    a. What could improve this?
    b. How useful would it be to have a permission to talk request?
7. Do you feel in the event of a pursuit that you have enough time to communicate with the control room?
8. Where the pursuit is double-crewed vehicles to what extent does the dynamic between driver and crew member influence your ability to risk assess?
    a. In what ways?
9. How comfortable do you feel with challenging the driver's decisions in a pursuit?
10. During a pursuit if you feel unwell, tied or impaired in some way do you feel you can discontinue a pursuit?
11. To what extent have you experienced red mist?
    a. If yes (how often)
    b. In what do you manage this?
12. Have you seen it in others?
    a. If yes
    b. In what do you manage this?

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13. Are there groups who pose a particular collision risk in pursuits?
    a. Two-wheel motorised vehicles
    b. The young (teenagers)
14. What role does air support play with assessing risk?
15. What are the issues around deciding to stop a pursuit in progress?
16. As an operator (passenger) in the car how comfortable do you feel challenging the driver about the way they are driving?
17. What repercussions on your personal life do you consider when deciding whether or not to continue with a pursuit?
18. To what extent do debriefs occur after each pursuit?
19. What protection does the current road traffic legislation afford a police officer in a pursuit?

Topic guide: Control room TAC advisors

The role of information and intelligence in deciding to pursue:

8. To what extent do you feel you have the knowledge and training in pursuit procedures in order to do the job?
9. What information/intelligence is important for you to assess risks and make a decision to pursue or not? (prompts):
    a. Nature of incident
    b. Type of vehicle
    c. Identity of criminal known
    d. Seriousness of offence
    e. Whether a juvenile
    f. The likely route - in respect of the time of day, road, weather, traffic, specific considerations such as schools, licensed premises or off-road terrain
10. What would you say is the most important reason to pursue?
11. Under what circumstances do you think a pursuit is a proportionate response?
12. Is the intelligence always available about the nature of a crime, particularly its seriousness in order for you to judge whether a pursuit is the proportionate response?
13. What aspects of intelligence do you take into account?
14. How do you judge the weight of intelligence?
15. To what extent do you feel you have reasonable information or intelligence to indicate that using alternative tactics is preferable to a pursuit?

Authorisation

20. What issues are there around the authorisation of a pursuit?
21. How could the process of authorisation be improved?

Dynamic risk assessment

22. The risks can change during a pursuit, to what extent do changes get reported to the control room?
23. Do you feel in the event of a pursuit that you have enough time to communicate with the driver / operator?
24. In what ways?
25. When you authorise a pursuit is there any chance for the driver to say they don't wish to because they feel unwell, tired etc?
26. Are there groups who pose a particular collision risk in pursuits?
    a. Two-wheel motorised vehicles

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b. The young (teenagers)

27. What role does air support play with assessing risk?
28. What are the issues around deciding to stop a pursuit in progress?

Evaluating pursuits effectiveness against policies

29. What evidence do you collect after you have discontinued a pursuit?
30. How do you evaluate the pursuit?
    a. the deployment of pre-emptive options
    b. operational outcomes
    c. good practice (submitted to the pursuit working group)
    d. compliance with the national decision model
    e. the impact on the human rights of individuals (Article 1: balancing the Right to Life against the right to protect the life of the public and the suspect)
31. How much do you learn from analysing past pursuits?
    a. How good is the data?
    b. Where are the gaps?
    c. What about when there has been a fatality, how much do you learn about:
        i. why the pursuit was undertaken and what alternatives (if available) were declined
        ii. what the objectives of the pursuit were
        iii. feasible options at various stages of the incident
        iv. decisions reached
        v. outcome and learning points from debriefs.

32. What is your understanding of the National Decision Model?
33. To what extent, if any, would you say that you refer to the NDM in pursuit situations? Is it useful?
34. Would you like further training in the NDM?
35. Is there anything else you would like to add?

Topic guide: stakeholders

Improving the safety of pursuits and how the national decision model is helping or hindering risk assessment

Policy

1. What are your views on the National Decision Model for pursuits?
    a. What impact do you feel it has had?
    b. What do you feel are the issues around its implementation?
    c. In what ways do you think pursuit management could be improved?
2. In other countries they have policies not to pursue what are you views on this?
3. To what extent do you think such a policy would affect crime rates?
    a. In what ways?
4. To what extent do you think public confidence is affected by pursuits?
5. Do you think that pursuits are justified in most cases?
6. Do you think the benefits outweigh the risks?
7. What would your views be of trialing a non-pursuit policy in one of the London boroughs?
8. What else would you like to say that we haven't covered?