RC PSYCH
ROYAL COLLEGE OF PSYCHIATRISTS

PS02/22

‘Acute behavioural disturbance’ and ‘excited delirium’

September 2022

POSITION STATEMENT

Contents

How to cite this publication:
Royal College of Psychiatrists (2022) College Position Statement PS02/22: 'Acute behavioural disturbance' and 'excited delirium'

Executive summary

The terms ‘acute behavioural disturbance’ (‘ABD’) and ‘excited delirium’ (‘ExD’) have been used to describe a situation in which a person is extremely agitated and distressed, usually in a public place, and in such a state of agitation that they may be at risk of a potentially fatal physical health emergency. While physical restraint must always be seen as the last resort, it is thought to significantly increase the likelihood of poor outcomes in this group of people. It has been argued that ‘ExD’ should be understood as a distinct syndrome with a high likelihood of a fatal outcome without medical intervention. However, there has been a clear move in the UK towards ‘ABD’ as a broader umbrella term for a patient presentation of severe agitation, distress and signs of physiological deterioration of unknown cause. Neither term is recognised as a diagnosis in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) or the International Classification of Diseases (ICD-11).

Current guidance on the management of ‘ABD’ across emergency services emphasises the importance of recognising this presentation as a physical health emergency. However, the lack of validated criteria to assess whether someone is experiencing ‘ABD’ means that some current management guidelines may apply to a significant number of people who are agitated and in distress, including people experiencing a mental health crisis without a physical health emergency.

The terminology, particularly ‘ExD’, has also been controversial when used in a way that minimises the role of restraint in understanding why someone has died following the use of force by police or health services, particularly those from ethnic minority backgrounds. The disproportionate use of force against people of colour is well documented across health and criminal justice in the UK. This makes the need for a robust consensus about how to understand, define and respond to this patient presentation particularly urgent, to make sure frontline services are supported in providing the best possible standard of care while ensuring appropriate scrutiny and accountability in the event of a death.

The Expert Reference Group reviewed best practice across mental health services as well as the broader literature on ‘ABD’ and ‘ExD’. During the development of this position statement, we, the Royal College of Psychiatrists, conducted extensive consultation with stakeholders across police, ambulance, forensic and emergency medicine, as well as with patients and carers and voluntary sector organisations working with affected communities.

This document is aimed at experts and professional bodies working across services caring for patients who are severely agitated and distressed. Noting the need for consensus and the development of comprehensive and aligned guidance for frontline staff, it does not provide clinical guidance but seeks to contribute to the development of a more robust consensus by setting out the psychiatric perspective on this important and controversial subject.

- Chapter 1 provides a brief history of the terms ‘ABD’ and ‘ExD’ and our motivation for producing a position statement on this subject.

- Chapter 2 sets out why a psychiatric perspective is critical to discussions around ‘ABD’.

- Chapter 3 explores the way in which 'ABD' (and 'ExD') are used across different services, considering the evidence base for current understandings of the terminology.

- Chapter 4 puts these discussions within the broader societal context, discussing how this influences how the terminology is understood and used today.

- Finally, Chapter 5 sets out a potential way forward.

In this position statement, we start by setting out our concern that the way 'ABD' is currently defined may lead to people who are agitated and distressed but not suffering from a physical health emergency being subjected to avoidable and potentially harmful interventions. We draw on mental health best-practice guidelines, including ongoing efforts to reduce restrictive practice and tackle mental health stigma, to consider how care for agitated and distressed persons outside of mental health settings could be strengthened, regardless of whether a person is suffering from a medical emergency or not. Finally, we make specific recommendations for how to address concerns about current definitions, including to support appropriate lesson-learning and accountability following deaths.

The position statement acknowledges the need for practical guidance for frontline staff who are being asked to respond to incredibly challenging situations. It speaks to how management approaches are necessarily determined by the capacity and capability of individual services, the settings in which they respond to patients, and the evidence and expertise that has been gathered across disciplines. On the basis of this position statement, we hope that we can work with partner organisations in a cross-disciplinary effort to develop strengthened and more aligned guidance and training for all professionals involved in the care of this vulnerable patient population.

Key messages for professional bodies

- Staff working in mental health services, including psychiatrists, manage extremely agitated and distressed patients on a daily basis across crisis, liaison, addictions, forensic and psychiatric intensive care services. Joint protocols and more robust training should be in place across services to ensure the care received by patients who are severely agitated and distressed is truly multi-disciplinary.

- There is significant variation in how 'ABD' is defined and understood across professions. This causes unhelpful confusion for frontline staff, those delivering training and those working in the coronial system. A consensus is urgently needed across stakeholders.

- Current guidance on 'ABD':

    - could potentially be applied to persons whose needs would be better met through de-escalation and a specialist mental health response. A lack of specificity regarding signs and symptoms that should prompt rapid transfer to an emergency department could put patients at risk of avoidable and potentially harmful interventions, including restraint.

- would be strengthened by drawing on the mental health evidence base on de-escalation, reducing restrictive practice, safe restraint, and compassionate communication and follow-up with patients.

- should acknowledge and reflect on the societal context in which these terms are defined and applied, including unconscious bias, discrimination, and mental health stigma.

- It is important that if someone is harmed by the inappropriate use of physical restraint or medication, services can learn from these mistakes. Those responsible must also be held to account. To ensure that this happens, the terminology used to describe someone who is distressed and agitated should not suggest that death is a very likely outcome.

- A "red-flag" approach to identifying physical health emergencies in an agitated person would help move away from diagnostic criteria based on controversial literature on ExD. Such "red-flags" could be applied to all persons subjected to restraint without resorting to a binary concept of 'ABD'.

- Current definitions of 'ABD' are too entangled with contested definitions of 'ExD' to effectively respond to criticisms of the latter. 'ExD' should never be used. Subjective and potentially racialised diagnostic criteria should be removed. Where this is not already the case, all guidance must acknowledge the scientific uncertainty surrounding these terms, emphasising that 'ABD' is not a diagnosis or cause of death.

- While a shorthand such as 'ABD' can facilitate effective triaging and rapid-health-based responses, alternative terminology which does not infer a diagnostic category, and which is more humanising, should be sought.

Key messages for future guidance

- Staff working in mental health services, including psychiatrists, manage extremely agitated and distressed patients on a daily basis, across crisis, liaison, addictions, forensic and psychiatric intensive care services. Specialist mental health input should be sought and made available at the earliest opportunity when responding to patients presenting in this way to support effective de-escalation, reduce unnecessary restrictive interventions and support safe restraint and appropriate follow-up.

- Acutely disturbed behaviour refers to a wide range of behaviours, with a wide range of underlying aetiologies and outcomes. It is characterised by agitation, distress, and potential violence. It is not a distinct diagnosis or cause of death.

- Verbal and environmental de-escalation are critical tools in supporting patients who are agitated and distressed. This is a critical step in providing care to people who are agitated and distressed, with a trauma-informed approach and the reduction of environmental and communication-related triggers at its core.

- Clinicians are encouraged to consider differential diagnoses when determining how to keep patients and other people safe. Some people who are severely agitated and distressed may be at risk of a sudden physical health emergency, particularly where the level of agitation is intense and sustained or where the patient has been restrained.

- It is important that clinicians are able to identify signs of a physical health emergency so that patients receive the right medical care quickly. These include a high temperature, rapid breathing, rapid pulse rate and extreme and sustained agitation.

- Restraint can both cause and exacerbate physical symptoms, increasing the likelihood of a sudden physical health emergency. Patients who have been restrained for their own or others' safety should be monitored closely.

- Transport to an emergency care setting and rapid tranquilisation or sedation should be considered for patients who do not respond to sustained attempts at de-escalation and for whom there is a serious concern of physiological collapse. Compassionate communication and follow-up with patients are critical throughout this process.

- A patient's ethnic background can have an enormous impact on their experience of interacting with emergency services. Previous negative experiences with police and health services will shape a patient's behaviour, while ingrained racial biases can affect the behaviour of staff. This must be considered when responding to patients' needs, particularly those from ethnic minority backgrounds.

- 'Acute behavioural disturbance' ('ABD') is a shorthand used across emergency services to describe patients who are agitated, distressed, and reasonably believed to be experiencing a medical emergency to expedite a health-based response.

- The evidence-base for these presentations is generally poor and the terminology remains controversial. 'Excited delirium' or 'ExD' should never be used and changes to terminology may occur as research advances and consensus is sought across stakeholders.

- It is important that if someone is harmed by the inappropriate or excessive use of physical restraint or medication, services can learn from these mistakes. Those responsible must also be held to account. To ensure that this happens, the terminology used to describe someone who is distressed and agitated should not suggest that death is a very likely outcome.

Key messages for patients and carers

- People can become very agitated and distressed for a range of reasons. Sometimes, this can be caused by or lead to a physical health emergency.

- When someone has to be restrained to protect themselves or others from harm, this can worsen an underlying physical health problem. When someone is restrained too forcefully, this can also lead to a physical health emergency.

- It is important that police officers, paramedics and pre-hospital clinicians, and healthcare professionals are trained to respond to people who are agitated and distressed in a health-focused and culturally sensitive way. This includes effective methods for de-escalation, safe restraint, recognising and responding to a medical emergency, and compassionate communication and follow-up with each patient. Current guidance and training should be strengthened to ensure this, and should include greater input from mental health experts.

- The terminology used to describe a situation where someone is agitated, distressed, and experiencing a medical emergency is controversial. Different professional groups use these terms in different ways, and the Royal College of Psychiatrists is concerned that this causes confusion and puts some patients at risk.

- The Royal College of Pyschiatrists advises against using 'ExD'. While we recognises the benefits of 'ABD' as a shorthand for frontline services, we recommend a search for a more humanising term.

- It is important that if someone is harmed by the inappropriate or excessive use of physical restraint or medication, services can learn from these mistakes. Those responsible must also be held to account. To ensure that this happens, the terminology used to describe someone who is distressed and agitated should not suggest that death is a very likely outcome.

- People from ethnic minority backgrounds are subjected to disproportionately greater use of force across health and criminal justice settings. The Royal College of Psychiatrists recommends that guidance on managing extreme agitation and distress should recognise and respond to this context and ensure that such guidance does not inadvertently perpetuate racial discrimination.

The working group

This position statement was developed by the Expert Reference Group (ERG) on 'acute behavioural disturbance' ('ABD') and 'excited delirium' ('ExD'), with representatives from across a number of RCPsych faculties. The ERG's members were:

- Dr Trudi Seneviratne (Chair)
- Dr Adrian James (President)
- Dr Subodh Dave (Registrar)
- Dr Lade Smith (Presidential Lead for Race and Equality)
- Dr Rajesh Mohan (Presidential Lead for Race and Equality)
- Dr Mayur Bodani
- Dr Michael Dilley
- Dr Matt Hartley
- Dr Josanne Holloway
- Dr Kate Jefferies
- Dr Josie Jenkinson
- Dr Nicola Kalk
- Dr Mani Krishnan
- Dr Mona-Lisa Kwentoh
- Dr Maurice Lipsedge
- Dr Aileen O'Brien
- Dr Annabel Price
- Professor Keith Rix
- Dr Prakash Shankar
- Dr Alex Thomson
- Dr Derek Tracy

The working group was supported by Janika Hauser, Policy Analyst and Commentary Manager at the Royal College of Psychiatrists.

The group is grateful for the valuable input received from colleagues across numerous faculties, including the Intellectual Disabilities Faculty in particular.

The working group engaged with a wide range of stakeholders throughout the development of this position statement and wishes to express its appreciation to colleagues from across police, ambulance, emergency and forensic medicine, and the voluntary sector for their input. While the consultation underlined the lack of consensus on this topic, there is a universal desire to improve patient outcomes and widespread recognition that greater consistency and collaboration is needed to secure this.

Patient and carer engagement took place through a series of workshops convened in partnership with the South London and Maudsley (SLaM) NHS Foundation Trust. Given the vulnerabilities of people thought to be most affected by 'ABD', this mode of engagement was selected to reduce barriers for participation and ensure maximum input from patients and carers into the ERG process.

SLaM provides services to patients in South-East London and was particularly well placed to support this rapid piece of work given its well-established system for commissioned patient and carer engagement. We would encourage those conducting further work on 'ABD' to partner with organisations across the UK to ensure greater geographic representation.

1. Background

The terms 'acute behavioural disturbance' ('ABD') and 'excited delirium' ('ExD') have been used to describe situations in which a person is extremely agitated and distressed. In emergency services, the terms are applied when someone is in such a state of agitation that they may be at risk of a physical health emergency. In some cases, first responders such as police and/or ambulance services may determine that there is a need to restrain the person to stop them from causing harm to themselves or others and to transport them to an emergency department for treatment of their physical symptoms. It is thought, however, that the application of restraint can lead to a worsening of their physical symptoms and mental state and therefore present a threat to life.

As has been noted by experts involved in the development of this position statement and in the guidance produced by UK professional bodies, this is an incredibly distressing situation for patients and their families.

For emergency service staff, ensuring the safety and welfare of the patient, members of the public, and staff themselves can be incredibly challenging, underlining the importance of robust guidance, protocols and training. In the UK, coroners have repeatedly criticised mental health crisis care services' failure to recognise and respond to medical emergencies in people who are distressed and agitated, as well as the excessive use of force against people who are in distress.

Considerable controversy has surrounded the terms 'ExD' and 'ABD' because of the frequency with which they are referred to in cases where someone has died following the use of restraint and/or force, particularly men from ethnic minority backgrounds (Rimmer A, 2021; American Medical Association, 2021). Hypotheses about potential hormone and electrolyte imbalances prompting agitation and physiological collapse have not been scientifically validated, and agitation and distress are generally not thought to be life threatening in and of themselves. There is, however, significant evidence that prolonged restraint can lead to physiological collapse.

While neither 'ABD' nor 'ExD' is a formal diagnosis, they have often been used as such, including as primary causes of death in inquests. Critics point to unvalidated diagnostic criteria, and to how many reported deaths are among people restrained for prolonged periods of time and where the restraint itself is likely to have been the principal cause of death. They note the increased use of force against people of colour across healthcare and law enforcement and argue that the terms prevent effective scrutiny and accountability by minimising the role of restraint in determining a cause of death.

> **Experiencing this kind of agitation and distress is terrifying – it feels like you are dying, and the response from emergency services often makes that worse. I remember not being able to speak to explain what was happening to me, and I was just treated as a threat.**
>
> — Quote from patient and carer workshop

How commonly ‘ExD’ and ‘ABD’ are used varies between countries and there is little reliable data. ‘ExD’ is more frequently used in the USA and in recent years, a number of organisations have issued statements rejecting ‘ExD’ as a diagnosis, noting their concern about racial bias and discrimination. In the UK, there has been a shift to using ‘ABD’ as a less controversial, broader umbrella term. However, concerns have been raised about how the term is defined and about how it is used, with criticisms similar to those made about the use of ‘ExD’.

In 2021, the Royal College of Psychiatrists issued a public statement rejecting ‘ABD’ and ‘ExD’ as diagnoses and noting their potential for perpetuating racial bias and discrimination. Though well received by many, some stakeholders raised concerns about the statement. One of the core criticisms was that emergency services rely on this terminology to train staff and develop protocols that support the recognition of people at risk of, or suffering from, a physical health emergency, emphasising minimal restraint and ensuring rapid transfer to emergency departments for physical stabilisation.

At the time of writing, several UK professional bodies have published guidance on the appropriate management of ‘ABD’. This includes the Royal College of Emergency Medicine, the Joint Royal Colleges Ambulance Liaison Committee, the Faculty of Forensic & Legal Medicine of the Royal College of Physicians, and the College of Policing.

The Royal College of Psychiatrists chose to withdraw its initial public statement pending the development of this position statement. This position statement has been developed by an Expert Reference Group (ERG) with members from across a number of the College’s faculties and following consultation with stakeholders as well as patients and carers. It is hoped that this statement presents a more detailed exploration of the issues at hand and contributes to the development of a professional consensus which ensures improved patient outcomes.

2. The role of psychiatrists

The terms 'ABD' and 'ExD' have primarily been used by the police, ambulance services, custodial services, those working in emergency departments, and forensic pathologists and coroners who are conducting investigations following a death. In this context, many psychiatrists working in liaison or forensic services are familiar with these terms, though they are not generally used in psychiatric practice. Nonetheless, the discussion about 'ABD' benefits from a psychiatrist's perspective for a number of reasons.

First, psychiatrists regularly engage with patients who are distressed, agitated and potentially violent. Some research has suggested that individuals with mental illnesses are at higher risk of experiencing potential episodes of 'ABD', particularly following an abrupt cessation of psychotropic medications (Stevenson R and Tracy D, 2021). More broadly, however, psychiatrists manage patients suffering from severe mental illnesses that can lead to unusual and erratic behaviour, similar to that described in cases of 'ABD', and which can at times be complicated by physical illness or substance use. Psychiatrists also support patients experiencing symptoms where the boundary between physical and mental health is blurred, such as in cases of delirium where there is an underlying physical cause for the altered mental state.

Regardless of the precise aetiology of the acutely disturbed behaviour, psychiatrists, and their colleagues within multidisciplinary mental health teams have considerable expertise in verbal de-escalation techniques, restraint and pharmacological interventions that are critical to the safe management of patients whose behaviour presents a risk of harm to themselves and/or others, and who may be at risk of a physical health emergency (National Institute for Health and Care Excellence, 2015; Patel, Sethi et al., 2018; Taylor D, Barnes T et al., 2021). Acknowledging the history of the use of excessive force and coercion, considerable work has been done in recent years across mental health services to improve patient care by reducing restrictive practice. This work continues.

Secondly, psychiatrists are also well versed in the application of mental health legislation, including the Mental Health Act 1983, the Mental Capacity Act 2005, and Use of Force Act 2018 in England and Wales, the Mental Health (Care and Treatment) (Scotland) Act 2003 and Adults with Incapacity (Scotland) Act 2000, and the Mental Health (Northern Ireland) Order 1986 and Mental Capacity Act (Northern Ireland) 2016. Some of these laws provide the frameworks under which police can detain someone who they think has a mental illness and needs immediate help. It is also the framework under which medical professionals can administer rapid tranquilisation and other treatments to individuals who lack capacity to consent to this.

A full understanding of these legal provisions and their application across different settings is critical in supporting people who are extremely agitated, distressed and who may be at risk of a physical health emergency while upholding their rights as an individual. The Royal College of Psychiatrists has also been actively involved in discussions regarding the reform of the Mental Health Act 1983 and is therefore well positioned moving forward to consider the implication of any legislative changes that may affect the management of patients.

Finally, as a specialty, psychiatry is continuing its efforts to unpick, understand and challenge racism in society, its impact on the mental health of patients and how racism has shaped the health system. The Royal College of Psychiatrists knows that profound inequalities exist for people from ethnic minority backgrounds in their ability to access treatment, their experiences of care, and their outcomes across the health system.

The Royal College of Psychiatrists has made an institutional commitment to address inequalities arising from a number of issues with diversity and inclusion, specifically in relation to racism (Royal College of Psychiatrists, 2021). A number of work areas are now being pursued as part of the College's Equality Action Plan, seeking to tackle racism and discrimination through its work as a membership organisation and a training body, in quality improvement initiatives alongside mental health trusts, and in its engagement with policymakers. This is ongoing work, relying on continued reflection and challenge, but the College hopes that the insights gained thus far will make a valuable contribution to the discussion on 'ABD' and thus help to improve patient outcomes.

3. Terminology

Excited delirium

While several links have been drawn to historical descriptions of mania (Bell LV, 1840; Maudsley H, 1897), the term 'ExD' was coined by Charles Wetli and David Fishbain in 1985. Based on a study of a small number of recreational drug users who died following police attendance, Welti and Fishbain described the following clinical progression:

> *"Symptoms began with the acute onset of an intense paranoia, followed by bizarre and violent behaviour necessitating forcible restraint. The symptoms were frequently accompanied by unexpected strength and hyperthermia. Fatal respiratory collapse occurred suddenly and without warning, generally within a few minutes to an hour after the victim was restrained. Five of the seven died while in police custody. Blood concentration of cocaine averaged 0.6mg/L, about ten times lower than that seen in fatal cocaine overdoses. Police, rescue personnel, and emergency room physicians should be aware that excited delirium may result of a potentially fatal cocaine intoxication; its appearance should prompt immediate transport of the victim to a medical facility. Continuous monitoring, administration of appropriate cocaine antagonists and respiratory support will hopefully avert a fatal outcome."*
>
> — Wetli CV and Fishbain DA, 1985

Over the following years, the term 'ExD' was increasingly used by first responders and pathologists in the United States. In 2009, the American College of Emergency Physicians (ACEP) formally recognised 'ExD' as a 'unique syndrome' ('ExDS' – excited delirium syndrome), characterised by the "hallmark triad of conditions that are delirium, psychomotor agitation and physiological excitation" (Hoffman L, 2009). ACEP went on to say that while the term had "long been the sole purview of medical examiners, largely because the syndrome is only diagnosed on autopsy", the formal recognition of 'ExD' marked "an initial step towards identifying its causes and preventing deaths that can occur in these patients". First responders were encouraged to recognise the condition as a physical health emergency, and to seek medical support as a matter of urgency.

ACEP's formal recognition of 'ExD' as a unique syndrome contributed to the term's further popularisation, used to delineate a distinct syndrome with a high fatality rate if left untreated and often being used as a primary cause of death in restraint-related fatalities across the US and UK (McGuinness T and Lipsedge M, 2022). Debate continued, however, over the precise diagnostic criteria, pathophysiology of fatal cases, and the prevalence of fatal outcomes outside of the use of restraint (Rimmer A, 2021). This, combined with its frequent use in relation to the deaths of Black men in custody and allegations of potential conflicts of interest among proponents of 'ExD', meant considerable controversy surrounds the term (Parquette M, 2003; Lipsedge M, 2016; McGuinness T and Lipsedge M, 2022).

While this debate prompted a move away from 'ExD' and towards 'ABD' in the UK (see below), the term continued to be widely used in the USA. More recently, however, renewed criticism was sparked by reference to 'ExD' in the defence of Derek Chauvin during his trial for the murder of George Floyd. In addition to its potential to prevent appropriate scrutiny of police violence through minimising the role of restraint in determining a cause of death, concerns have also been raised about the increased use of ketamine to sedate people declared to be potential 'ExD' cases, sometimes purely on the basis of their non-compliance with police orders (De Yoanna and Solomon R, 2020).[1]

In 2020, the American Psychiatric Association issued a statement concluding that 'ExD' should not be used until a clear set of diagnostic criteria could be validated, and calling for a comprehensive, nationwide investigation into the term's use (American Psychiatric Association, 2020). The American Medical Association followed suit in 2021, issuing a statement which opposed the use of 'ExD' as an official diagnosis, and warning against its use to justify excessive police force and pharmacological interventions such as the administration of ketamine (American Medical Association, 2021). Without updating or refuting its 2009 white paper, ACEP issued a document in 2021 suggesting alternative terminology be used to refer to these patient presentations, namely 'hyperactive delirium with severe agitation' (Hatten B, Bonney C et al., 2021).

> **This terminology is so dehumanising – it suggests there is a diagnosis where there isn't one and can be used to justify harmful restraint and sedation.**
>
> — Quote from patient and carer workshop

Acutely disturbed behaviour in psychiatric settings

Acutely disturbed behaviour is a well-recognised descriptor in psychiatry. It is important to emphasise, however, that it does not represent a distinct clinical syndrome or diagnosis. The following definition has been proposed:

> *"It usually manifests with mood, thought or behavioural signs and symptoms and can either be transient, episodic or long-lasting. It can have either a medical or psychological aetiology and may reflect a person's limited capacity to cope with social, domestic or environmental stressors. Use of illicit substances or alcohol can accompany an episode of acute disturbance or can be causative. The acute disturbance can involve threatening or actual violence towards others, the destruction of property, emotional upset, physiological distress, active self-harming behaviour, verbal abuse, hallucinatory behaviour, disinhibition, disoriented or confused behaviour and extreme physical over-activity."*
>
> — Beer MD, Pereira SM et al., 2001

1 It should be noted that this concern has not been raised explicitly in the UK, where the policing system and guidance around ketamine use in pre-hospital settings is different from the US.

The British Association of Psychopharmacology (BAP) and the National Association of Psychiatric Intensive Care and Low Secure Units (NAPICU) note the lack of unified definitions on this subject, but go on to define 'acute disturbance' as:

> *"an acute mental state associated with an underlying mental and/or physical disorder in the form of: (i) agitation and distress, which is excessive verbal or motor activity that may or may not lead to aggression or violence; or (ii) actual aggression or violence entailing harm, hurt or injury to another person, or damage to property regardless of whether it is verbally or behaviourally expressed, physical harm is sustained, or the intention is clear"*
>
> — Patel, Sethi et al., 2018

In mental health settings, these terms are used to describe a wide range of behaviours, ranging from distress and agitation that can be managed by de-escalation through to those that may require physical restraint and chemical intervention in order to keep the patient and staff safe. As such, psychiatrists would very rarely describe someone as "having 'ABD'", and never in a way that suggests that it is a distinct diagnosis.

Crucially, psychiatrists emphasise that behavioural disturbance is a non-specific term applied to a presentation which has one, or sometimes more than one, underlying specific cause. While some underlying physical causes of acute disturbances may themselves represent a threat to life (e.g. brain injury, drug toxicity, etc.), most do not unless there is prolonged or excessive restraint or rapid tranquilisation. Where restraint is used, there is recognition of a clear risk of physiological dysregulation and/or collapse (Patel, Sethi et al., 2018). Patients and carers consulted for this position statement emphasised that while the distress they have experienced has not threatened their physical health, the interventions taken by public services in response to this behaviour have caused both psychological and physical harm. As such, a psychiatrist would never regard acutely disturbed behaviour on its own as a medical emergency.

> **"The only physical harm I experienced following a mental health crisis came from being restrained inappropriately. Distress doesn't kill, but the response to it can."**
>
> — Quote from patient and carer workshop

Instead, specific indicators are used to identify where a patient may be deteriorating while they are extremely agitated and distressed, including when restrained. These are in line with those monitored by the National Early Warning Score (NEWS), namely temperature, pulse, systolic blood pressure, respiratory rate, oxygen saturation, level of consciousness or new confusion (Patel, Sethi et al., 2018). When restraint is applied, guidance insists on a designated and appropriately trained person being solely responsible for monitoring the patient's physical condition. Nonetheless, the acutely disturbed behaviour is not, in and of itself, considered a potential cause of a physical health emergency or death.

Guidance about the appropriate management of patients presenting in this way, based on the psychiatric evidence base, is discussed further in section 5.

‘Acute behavioural disturbance’ in emergency services

Over the last ten years, ongoing controversy surrounding ‘ExD’ has prompted a move away from the terminology among UK stakeholders. In 2014, a Metropolitan Police Review concluded that the term ‘ExD’ “encourages failure to recognise the multi-factorial pathophysiology” of deaths following restraint, and that its inclusion in documentation “has the tendency to prevent lessons from being learned following adverse incidents” (Metropolitan Police Service, 2004). The same conclusion was reached by The Rt Hon Dame Elish Angiolini DBE QC in her 2017 Independent Review of Deaths in Police Custody. She recommended that:

> *“‘Excited Delirium’ should never be used as a term that, by itself, can be identified as the cause of death. The use of Excited Delirium as a term in guidance to police officers should also be avoided”*
>
> — Angiolini E, 2017

The Angiolini Review argued that, regardless of a debate on the terminology and diagnostic classification, there was “a constellation of signs and symptoms” indicative of a person requiring urgent medical attention, and that these persons should not be restrained except in the most extreme, life-threatening circumstances (Angiolini E, 2017).

Emergency service staff continued to face immense challenges in providing urgent medical care to patients who were distressed, agitated and potentially violent. While the usefulness of the term ‘ExD’ had been questioned, repeated criticism by coroners of police and ambulance services for failing to recognise the physiological deterioration of patients underlined the importance of guidance and training to secure better patient outcomes.

In this context, UK stakeholders were drawn to using ‘acute behavioural disturbance’ (‘ABD’) as a less controversial alternative. This is particularly because the possibility of multiple underlying physical and psychological aetiologies is more explicit within established definitions of acutely disturbed behaviour in the psychiatric literature. The London Ambulance Service, for example, has noted that the move to ‘ABD’ is to recognise that it is not a definite condition but a spectrum of behaviours, with multiple potential causes (Helppi A, 2021). The Royal College of Psychiatrists has itself contributed to the development of guidance for managing this kind of presentation, emphasising the importance of a health-based response and focusing on de-escalation. The College is also aware of a number of welcome ongoing efforts across the UK to improve the recognition and response to this patient presentation.

While most stakeholders now principally use ‘ABD’, the link with the heavily criticised term ‘ExD’ has been difficult to sever on a practical level. Because guidance on ‘ABD’ for emergency services focuses on patients who may be at risk of physiological deterioration, descriptions of the signs and symptoms continue to be drawn from ‘ExD’-specific literature as opposed to broader categories used in psychiatric practice. While the stronger focus on de-escalation in UK guidance must be welcomed, descriptions of potential clinical progression emphasise the risk of sudden physiological collapse among

all patients presenting in this way, often regardless of restraint or rapid tranquilisation. While reference to verbal and environmental de-escalation is often made more explicitly than in historical guidance on 'ExD', the focus remains on rapid transfer to an emergency department, where drugs may be administered following clinical assessment, including high-dose antipsychotic drugs or general anaesthesia.

There has also been a need to communicate the shift in terminology to professionals with pre-existing awareness of 'ExD' as a medical emergency. As a result, much of the current guidance offered to UK professionals still makes explicit reference to 'ExD'. In some cases, the terms are used almost synonymously as "ABD/ExD". Some guidance also suggests that 'ExD' is still used to describe the most severe forms of 'ABD'. 'ABD' has often been described as "the new name for ExD", and while some texts recognise the latter has been surrounded by controversy, very little detail is offered as to the reasoning behind this shift. While most guidance emphasises that 'ABD' should not be used as a distinct diagnosis but as an umbrella term, further confusion may be sown by phrases like "diagnosing 'ABD'", "people suffering from 'ABD'" or descriptions of 'ABD' as "a condition".

Thus, while most psychiatrists would refer to "acutely disturbed behaviour" when describing a very broad range of presentations, 'acute behavioural disturbance' often appears to be a much more distinct category which is necessarily associated with a significant risk of a physical health emergency. As such, definitions of 'acute behavioural disturbance' [noun] in emergency service contexts are sometimes far more similar to established definitions of 'ExD' than psychiatric understandings of 'acutely disturbed behaviour' [adjective]. For this purpose, this position statement will use 'ABD' where this refers to a condition of imminent physiological collapse, and an adjectival description when referring to the broader patient presentation described in psychiatric services (e.g. severely agitated and distressed).

Identifying cases of 'ABD'/'ExD'

Neither 'ABD' nor 'ExD' are recognised diagnoses in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) or the International Classification of Diseases (ICD-11). Rather than being conceived as a distinct entity, some have argued that 'ABD' should instead be seen as a "final common pathway" where different causes of agitation and distress can lead to potentially fatal physical symptoms (Stevenson R and Tracy D, 2021). The pathophysiologic mechanism to 'ABD' has not been elucidated fully. However, existing literature proposes that for some people in a disturbed mental state, a fight-or-flight response can result in a severe state of catecholamine excess and metabolic acidosis (a severe hormone and electrolyte imbalance), which may be accompanied by hyperthermia (high body temperature). These symptoms may be so severe that they represent a threat to life, especially where combined with prolonged struggle against restraint (American Medical Association, 2021; Stevenson R and Tracy D, 2021). Notably, excessive restraint and prolonged struggle against restraint can lead to similar symptoms, regardless of any underlying physical or mental condition.

In the absence of a validated pathophysiology or diagnostic criteria, a series of signs and symptoms based on case reports are generally used to determine if someone is

likely experiencing an episode of 'ABD'. The original ACEP paper on 'ExD' proposed a total of 10 "pre-hospital potential features", drawing on a Canadian study of 1 million police/public encounters (Hall C, Kader AS et al., 2009). Of the 698 encounters involving force, 24 probable cases were identified based on perceived abnormal behaviour and the following criteria:

- Pain tolerance
- Tachypnoea (unusually rapid breathing)
- Sweating
- Agitation
- Tactile hyperthermia (hot to touch)
- Police non-compliance
- Lack of tiring
- Unusual strength
- Inappropriately clothed
- Mirror/glass attraction

These signs and symptoms have been rephrased and supplemented by further publications across the academic literature and professional guidance, including guidance referring to 'ABD' only (Gonin P, Beysard N et al., 2018). Reference has been made to repetitive requests for help and expressions such as "I'm dying", a lack of fear, extreme violence, and an insensitivity to irritant sprays and tasers (College of Paramedics, 2018; the Faculty of Forensic & Legal Medicine of the Royal College of Physicians, 2019; Forensic Science Regulator & Royal College of Pathologists, 2020; Joint Royal Colleges Ambulance Liaison Committee, 2021; College of Policing, 2021; Royal College of Emergency Medicine, 2022). These are all based on retrospective analyses of case reports or case series. Given ongoing debates around the precipitative role of restraint in physiological deterioration of extremely agitated patients, it should be noted that most of these studies rely on use-of-force case reports, where the precise interaction of restraint and an underlying pathophysiology is difficult to untangle (Hall C, Butler C et al., 2009; Baldwin S, Hall C et al., 2016; Baldwin S, Hall C et al., 2018).

Furthermore, although the ACEP white paper referred to the "hallmark triad of conditions that are delirium, psychomotor agitation and physiological excitation", features of delirium have not been assessed in many of the case reports and case series. This includes the Canadian study of police/public encounters, which calls into question the designation of the 24 cases as being ones of probable 'excited delirium' (Hall C, Kader AS et al., 2009). In some cases, the terms 'ExD' and 'ABD' have been applied to patients who have clearly not been delirious.

While the ACEP white paper suggests that 6 out of 10 clinical features are used as a threshold for identifying a 'case' of 'ExD', reports suggest that many patients are "diagnosed" despite presenting with far fewer of these features (Kutcher S et al., 2009; Gonin P, Beysard N et al., 2018). The most recent guidance issued by the Royal College of Emergency Medicine on 'ABD', for example, offers a similar list of signs and symptoms as literature on 'ExD' but notes that "***one or more*** features ***may*** be present in 'ABD'" [emphasis added] (Royal College of Emergency Medicine, 2022).

Discussion

Current UK definitions of a suspected case of 'ABD' are thus both exceptionally broad and based on highly subjective signs. Beyond potentially applying to patients whose relatively mild behavioural disturbance could be managed through de-escalation, many of the listed signs and symptoms are experienced in day-to-day life with no underlying pathology. For example, fear and panic are often a natural response to threatening or otherwise unpleasant stimuli. Sustained non-compliance with police or ambulance staff can be an intentional and even rational choice. Understandings of what precisely constitutes hypervigilance, unusual strength or an appropriate response to pain vary from person to person. Patients and carers consulted during the development of this position statement have emphasised that most of the signs and symptoms used to identify 'ABD' are reflective of their experience of intense distress, as opposed to any diagnosable health condition.

> **I have experienced all these symptoms while being in a mental health crisis, and there was absolutely no physical health emergency. The way that 'ABD' is defined is way too broad.**
>
> — Quote from patient and carer workshop

Section 4 discusses these criteria in the context of racial discrimination and bias, but it is clear that the way in which signs and symptoms of 'ABD' are currently described is not sufficiently specific to those patients at risk of a sudden physical health emergency. The Royal College of Psychiatrists is therefore concerned that current clinical guidelines may be applied to patients, including people with severe mental illnesses, for whom alternative interventions would be far more appropriate. The preference for a health-based response in situations of uncertainty is no doubt positive, but by creating a potentially skewed perception of an extreme risk of sudden physiological collapse, the quality of de-escalation efforts may be significantly impacted.

Beyond the impact this has on the care received by individual patients, this approach to defining 'ABD' remains problematic in relation to retrospective investigations of patients' deaths. There are few confirmatory tests to determine whether a person was experiencing a condition that would result in a sudden physical health emergency if left untreated. While a minority of the signs may be tested directly or indirectly by measuring body temperature, heart rate, blood pressure and by specific blood tests, many of these can often only be done after the suspected episode of 'ABD', usually following physical or chemical restraint. Furthermore, the results provided are by no means specific to 'ABD' and can be indicative of a whole host of differential diagnoses, including having been subject to excessive restraint. As the 2009 ACEP paper itself recognises:

> *"The difficulty surrounding the clinical identification of ExDS is that the spectrum of behaviours and signs overlap with many clinical disease processes. ExDS is not intended to include these diseases, except insofar as they might meet the definition of ExDS. Treatment interventions targeted at one of these alternate diagnoses may potentially alleviate or exacerbate ExDS, thus further confounding the diagnosis."*
>
> — American College of Emergency Physicians, 2009

The lack of validated diagnostic criteria also presents a real challenge for those wishing to conduct further research on 'ABD', particularly efforts to prove current hypotheses about any potential underlying pathophysiology or to conduct epidemiological studies. More than a decade after ACEP's initial statement, the American Medical Association summarised its review of the literature on 'ExD' in 2021:

> *"Despite a lack of scientific evidence, a universally recognised definition, a clear understanding of pathophysiologic mechanisms, or a specific diagnostic test, law enforcement and EMS personnel are taught that 'ExD' is a potentially deadly medical condition – including at times, by physicians. Even deaths attributed to 'ExD' have no consistent anatomical findings, resulting in 'ExD' diagnosis being one of exclusion, defined by epidemiology and the subjective description of a clinical presentation."*
>
> — American Medical Association, 2021

In this context, the Royal College of Psychiatrists welcomes the move away from 'ExD' and the attempts to use terminology that accounts for the multiple aetiologies that may lead people to become distressed and behave in erratic and potentially dangerous ways. However, it is concerning that the way in which 'ABD' is being used today is difficult to distinguish from 'ExD', potentially creating the impression of a distinct diagnostic entity and suggesting that a series of broad and non-specific signs and symptoms indicate that someone is, or was, at high risk of sudden death. While other alternative terminologies have been proposed, including "autonomic hyperarousal state" (AHS), agitated delirium, and hyperactive delirium with severe agitation, the same challenges persist (Kutcher S et al., 2009; Strommer E, Leith W et al., 2020; American College of Emergency Physicians, 2021). As such, the change in terminology has failed, in the College's view, to adequately respond to criticisms of 'ExD' and risks being used in much the same way, while applying to a far broader group of patients – for many of whom the proposed management approaches would be entirely disproportionate.

4. Societal context

Structural racism in the UK

> **I have seen the disproportionate use of force against young Black men repeatedly. This is a systemic problem, and it has a massive impact on my community.**
>
> — Quote from patient and carer workshop

Ethnic disparities in healthcare are complex and can be difficult to unpick. Broader societal inequities increase the risk of people from different ethnic groups becoming ill, while direct and indirect racial discrimination have an enormous impact on their access to, experience of and outcomes from healthcare (Raleigh V and Holmes J, 2021).

The Independent Review of the Mental Health Act 1983, chaired by former Royal College of Psychiatrists President Professor Sir Simon Wessely, found a consistent over-representation of Black African and Caribbean people among those patients subject to restraint and/or detention in the mental health system (Department of Health and Social Care, 2018). The review heard that people of Black African and Caribbean heritage:

- are 40% more likely than white British people to come into contact with mental health services through the criminal justice system.
- are disproportionately subjected to the use of section 136.
- have longer average lengths of stay in hospital.
- have higher rates of repeat admissions.
- have higher rates of seclusion.
- are up to eight times more likely to be placed on Community Treatment Orders.
- are less likely to be offered psychological therapies.
- have higher drop-out rates from cognitive behavioural therapy for psychosis.

Evidence of racism and ethnic disparities in medicine is by no means restricted to mental health services. In the UK, maternal mortality rates are five times higher among Black women than among white women, and Black patients have lower than expected rates of access and use of a wide range of services, including cardiovascular and cancer services (MBRRACE-UK, 2020; Raleigh V and Holmes J, 2021). Studies have also demonstrated racial bias in admission rates in emergency departments, and in pain assessment and treatment recommendations, with Black patients systematically undertreated relative to white patients (Hoffmann K, Trawalter S et al., 2016; Zhan X, Carabello M et al., 2020). The experiences of staff from ethnic minority backgrounds across the NHS offers further evidence of the institutional racism that continues to plague our health services (Tonkin T, 2022).

The impact of racism and discrimination is also well-established in policing. At a global level, the 2021 annual report of the United Nations High Commissioner for Human Rights focused on the "excessive use of force and other human rights violations by law enforcement officers" against Africans and people of African descent

(United Nations High Commissioner for Human Rights, 2021). The UK Government has acknowledged that there is 'significant overrepresentation of Black, Asian and minority ethnic (BAME) individuals in the criminal justice system' (Gov.uk, 2016).[2] Almost two decades after the Macpherson Report into the death of Stephen Lawrence (where it was found that the Metropolitan Police were institutionally racist), the Independent Review of Deaths and Serious Incidents in Police Custody chaired by Dame Elish Angiolini highlighted the disproportionate number of people from BAME communities who have died following the use of police force. A report by the IOPC found a pattern of more extensive or prolonged use of conducted electrical devises (e.g. Taser™) against Black people and also against people in distress (Dodd V, 2021).

It is important to emphasise that these findings do not in any way indicate that every single person working within these services is racist. That would be to disregard the immense effort of staff to deliver high quality care and challenge racism every day. Instead, these findings reflect the insidious nature of bias and its effect on our perceptions of other people, as well as the progress which still needs to be made across institutions to ensure proper accountability for those whose behaviour is overtly racist. In this context, the Royal College of Psychiatrists welcomes ongoing efforts to better understand disproportionality across public services, including the Race and Health Observatory, the Independent Review into Disproportionate Effects of Use of Taser, and the Independent Advisory Panel on Deaths in Custody.

'ABD'/'ExD' and racism

There is evidence that some proponents of the term 'ExD' were intentionally seeking to minimise the role of restraint and conducted electrical devices (e.g. Taser™) in explaining deaths in custody (American College of Emergency Physicians, 2021; McGuinness T and Lipsedge M, 2022). It is unsurprising, then, that organisations advocating for racial justice have been especially critical of 'ExD'. In the US, both the American Civil Liberties Union (ACLU) and the National Association for the Advancement of Colored People (NAACP) have long argued that 'ExD' is being used as a 'medical scapegoat' for police abuse (Parquette M, 2003).

Despite emphasis on 'ABD' being an umbrella term and prompting a health-based response, a number of UK stakeholders have raised concerns about the insufficient distinction between 'ABD' and 'ExD'. Black Thrive has argued that 'ABD' has "been used as a justification for deaths in custody and within the health and care system" (Black Thrive, 2021). The charity, INQUEST, has echoed these concerns:

> *"There is a longstanding pattern of dangerous and disproportionate use of fatal restraint and neglect against people from racialised groups, particularly Black men and those in mental health crisis. We share concerns that Acute Behavioural Disturbance is often framed as a diagnosis to explain away the role of restraint and deny the responsibility of those involved, be they police, prison or health workers. Many deaths have raised serious concerns about the demonization and dehumanisation of those who have died, pointing to the reality of institutionalised racism in our public services."*
>
> — Black Thrive, 2021

2 The term 'BAME' has rightly been criticised as an unhelpful acronym which aggregates a group of people from diverse backgrounds with huge disparities in experience and outcomes across the health system. In recognition of this, this position only uses this term in direct quotes or when referring to reports in which this grouping was used to conduct analyses.

There is clearly a link between how the terms 'ExD' – and to a lesser extent 'ABD' – have been used and racial discrimination. The 'typical case' of 'ABD' is often described as being a Black man in his thirties, but the reasons for a person's race or gender predisposing them to the condition are unclear. 'ExD' has been found to be more likely to be applied posthumously following deaths in custody, while alternative terminology is used to describe the presentation of patients and detainees who survive an encounter with emergency services (Strommer E, Leith W et al., 2020). The UK inquests of which we are aware that reference 'ExD', and more recently 'ABD', are disproportionately related to the deaths of men with ethnic minority backgrounds (see annex). Many of them died following periods of prolonged and intense restraint, with concerns frequently raised about insufficient recognition of the role of restraint in contributing to these deaths directly.

While guidance against the use of 'ExD' as a primary cause of death is now in place, 'ABD' has been invoked as the cause of death in a number of recent inquests, including that of Andrew Hall and Jason Lennon. Police have questioned the Scottish government's decision to include consideration of the role of race within the inquiry into the circumstances of Sheku Bayoh's death, while arguing that he died as a result of 'ABD' (Scottish Government, 2020).

It is in this context that the current set of signs and symptoms ascribed to 'ABD' are particularly concerning. Dame Elish Angiolini writes in her review that "the stereotyping of young Black Men as 'dangerous, violent and volatile' is a longstanding trope that is ingrained in the minds of many in our society". She goes on to say:

> *"It is not uncommon to hear comments from police officers about a young Black man having 'superhuman strength' and being 'impervious to pain'; and often, wholly inaccurately, as 'the biggest man I have ever encountered'. Such perceptions increase the likelihood of force and restraint being used against an individual who may be unwell. The detainee is effectively dehumanised. In such circumstances the police officers may also use force and restraint in order to gain compliance to the exclusion of any focus on the wellbeing of the detainee which can ultimately lead to a medical crisis or death."*
>
> — Angioloni E, 2017

The physiological conditions thought to precipitate death in cases of 'ABD' are difficult to distinguish from the conditions that can also arise following excessive restraint and prolonged struggle (Lipsedge M, 2016). Retrospective descriptions of people of colour experiencing the signs and symptoms associated with 'ABD' are thus deeply problematic, especially where used to minimise the role of restraint as a cause of death. Aside from playing into well-known racist stereotypes, the current set of signs and symptoms pathologises fear, resistance to restraint and statements such as "I'm dying" by suggesting these are indicative of some underlying and potentially fatal medical condition, as opposed to a potentially understandable reaction to police force.

> **There's no such thing as superhuman strength. I am a human in distress. I may feel like I am fighting for my life, but that doesn't stop be from being a person with human strength. That label is so prone to bias and stigma.**
>
> — Quote from patient and carer workshop

Stigma and mental health

Mental illness has a long history of being stigmatised, and there is significant evidence that this stigma presents a barrier to seeking and obtaining appropriate treatment for people with mental illnesses (Sickel A, Seacat J et al., 2014). There is also significant evidence of mental health stigma within emergency services, which harms both patients and staff, who are often exposed to traumatising experiences (Bell S, Palmer-Conn S et al., 2021; Auth N M, Booker M J et al., 2022).

De-escalation delivered by the emergency services can be highly effective when responding to the needs of people in mental health crisis. However, where a patient's response to attempts at de-escalation is not as hoped, this can be more reflective of the quality of this de-escalation than any underlying medical emergency.

While current guidance often refers to the importance of de-escalation, the patients and carers consulted as part of this position statement emphasised that their experience of attempted verbal and environmental de-escalation by emergency and health service staff was often poor. Participants recounted repeated incidents in which attempts at de-escalation were restricted to being talked or shouted at. Staff often didn't introduce themselves by name, did not offer reassurance or support, and relied heavily on jargon.

There remains a lack of knowledge about the impact of sensory overload. This includes the particular needs of people with intellectual disabilities. People with intellectual disabilities have higher rates of mental disorders than the general population, but emergency and health service staff often struggle to distinguish between behaviours and symptoms indicative of a mental health crisis, responses to changes in their environment, and a physical emergency. This is particularly the case where a person may be non-verbal, with insufficient attempts at reasonable adjustments and alternative communication methods potentially undermining the quality of care.

Patients and carers also reflected on their experience of physical restraint being employed for behaviour that did not pose any risk but was deemed to be odd or inconvenient by police, ambulance, and health service staff.

> **"The threshold for restraining someone is often really low – I have been slammed against the pavement or a wall because my behaviour was deemed odd or eccentric."**
>
> — Quote from patient and carer workshop

While participants emphasised that they had often come to experience the very best of police and NHS during physical health emergencies, they described some of their interactions with the same institutions during mental health crises as "being treated as sub-human". In this context, it is alarming to hear of anecdotal evidence that people presenting with 'ABD' are described as universally lacking capacity to consent. Given the non-specificity of current case definitions, this is likely incompatible with current mental health legislation and risks undermining the quality of care for a significant number of patients. Similarly, the continued criminalisation of distress and use of

mechanical restraints like handcuffs on patients with acute mental health needs is entirely unacceptable and a reflection of how much more must be done to root out mental health stigma across public services and wider society.

Securing appropriate mental health input

The capacity and capability of emergency service staff to respond to acutely distressed and agitated persons will always be different to that of inpatient mental health services, and the discussion above highlights the value of direct input from mental health specialists when responding to patients who are agitated and distressed.

The Royal College of Psychiatrists recognises and shares concerns about the consistent challenges faced by police, ambulance and emergency medicine services in securing this specialist mental health input at the speed required when responding to the most acute patient presentations. While the 'Side by Side' consensus on working together to help patients with mental health needs in acute hospitals has started to address some of these barriers, there is still significant work to be done (Royal Colleges of Pyschiatrists, Nursing, Emergency Medicine and Phycisians, 2020). Similarly, the expansion of mental health crisis services has prompted the development of innovative new services like street triage teams and joint response cars. While encouraging, provision remains very patchy and efforts to strengthen the evidence-base are likely required before widespread roll-out is possible.

While these efforts continue, there remains a pressing need to improve the mental health training offered to staff working within emergency services. While incidents with a primary or secondary mental health component represent an ever-increasing proportion of call-outs, mental health remains a relatively small component of training for police officers and paramedics – both pre-qualification and during regular continuing professional development. For example, while 'ABD' as a medical emergency is refreshed annually as part of a police officer's first aid training, mental health training remains patchy across the country despite continuing efforts to improve this.

> **Staff need more training, particularly on how to put themselves in the shoes of someone in this state. Role plays and involvement from experts by experience could be life-saving.**
>
> — Quote from patient and carer workshop

Discussion

The Royal College of Psychiatrists recognises the existence and impacts of racism, discrimination and mental health stigma across all sections of society, including in healthcare and policing. The definition and application of terminology such as 'ABD' has to be understood in this context.

The way in which 'ABD' is currently defined is deeply problematic because of the way in which some signs and symptoms play into racist stereotypes. In the context of the increased and often disproportionate force used against Black men in both healthcare and policing, the College is concerned about the way in which 'ABD' can be used to minimise the role of restraint in explaining why someone has died. As a result, current definitions may undermine effective accountability, particularly in relation to deaths where there was no underlying physiological dysregulation prior to the application of restraint. While the intention of current professional guidance is to improve patient outcomes, the College is not satisfied that it takes sufficient steps to mitigate against the risks posed by current definitions of 'ABD' for people of ethnic minority backgrounds. In order to offer appropriate care to people who are agitated and distressed, it is vital that guidance and training takes into account unconscious bias and mental health stigma more broadly.

The Royal College of Psychiatrists is concerned that currently frontline staff are not sufficiently supported to offer the best possible standard of care. While current guidance on 'ABD' emphasises the importance of proper de-escalation, training on how to do this in a way that is responsive to the individual needs of patients, and how to maintain de-escalation throughout any medical interventions, remains insufficient. Meanwhile, the rationing of specialist mental health input vis-à-vis emergency services is the inevitable product of the historic underfunding of mental health services and persistent staff shortages. It is nonetheless unacceptable – particularly in situations in which there is a potentially acute threat to life. This status quo does a disservice to both patients and staff.

> **This is a traumatising experience for emergency service staff too – they need proper training and support.**
>
> — Quote from patient and carer workshop

In the long term, the ideal scenario would likely be that specialist mental health services act as first responders in these situations, seeking additional medical or law enforcement support only where required. However, the current staff and resourcing landscape means that closer integration and collaboration between services is likely the most practical way forward. This means expanding integrated services wherever possible and strengthening joint protocols, clinical leadership and training across services is essential. This patient population has complex needs which transcend boundaries between professions and specialties, and securing positive outcomes will rely on a proactive breaking down of siloes.

5. A way forward

Finding a way forward

This position statement is not intended to resolve ongoing debates around 'ABD'. The scientific uncertainty means that a coherent resolution to these controversial discussions will likely be dependent on significant additional research and in-depth discussions between professionals working across different services and specialties. Research is needed to understand the patient presentation and pathophysiology as well as to consider the most appropriate treatment approaches. The latter should include, for example, research into the incidence of 'emergence phenomena' of psychotic symptoms following ketamine use and toxicological research to establish associations with particular forms of intoxication or withdrawal states. Progress could be made through improved data collection across services, including a national registry of cases and outcomes, but greater public funding for research in this field is urgently needed.

Until such a time, however, there is clearly a need to establish an interim consensus which ensures that patients who are extremely agitated and distressed receive the right care, regardless of whether they are at risk of an imminent physical health emergency and without undermining appropriate accountability for deaths caused by an excessive use of force. The lack of consensus on this topic creates unhelpful confusion for staff working across frontline services, which undermines patient outcomes and makes collaboration and learning across professions more difficult. To ensure that patients receive the best possible standard of care, while minimising the risks that have been identified in relation to existing terminologies and practices, this interim consensus will need to be reached across specialties and professions.

> **We need proper accountability to learn lessons. It's already really difficult to get information from services after things go wrong. This terminology can be used to stand in the way of proper investigations and challenging questions by suggesting a person was going to die anyway.**
>
> — Quote from patient and carer workshop

Below, we set out a potential way forward, drawing on psychiatric expertise and evidence to respond to the questions and concerns raised in prior chapters. Some of these may find quick support from across different stakeholders, while others may require more detailed discussions and deliberation to find a workable agreement.

In this context, the Royal College of Psychiatrists therefore recommends:

- A cross-sector working group should be convened to develop an interim consensus on 'ABD', with active involvement of patients and carers, to agree terminology, key principles for professional guidance, and priorities for further research.

- This group should include representatives from police, custodial, ambulance, emergency medicine, mental health, and the judicial and coronial system. Support from relevant government departments would help ensure consistency across services.

- Further research should be urgently commissioned, including detailed investigation into how racial bias plays into the application of terminology such as 'ABD'.

- Members of the cross-sector working group should collaborate on the development and delivery of training materials for staff working across public services

- All services should seek to improve standardised collection of disaggregated data on presentations and outcomes, and to conduct regular multi-disciplinary reviews to support high-quality research on this topic.

Terminology

The terminology currently used to describe a presentation of extreme agitation with signs and symptoms indicative of physiological deterioration is flawed. While describing a vast range of presentations, it can still be misconstrued as a distinct diagnosis. While the evidence-base about the likelihood of fatal outcomes in the absence of physical or chemical restraint remains highly contested, some current definitions suggest that this is almost inevitable. RCPsych welcomes the move away from 'ExD' and towards a label which seeks to recognise multiple underlying aetiologies and potential outcomes. However, current definitions of 'ABD' are still too closely bound to contested definitions of 'ExD' to sufficiently respond to criticisms of the latter.

Nonetheless, it is vital that progress made in the UK to improve recognition and prompt health-based responses is not lost in an effort to resolve this problem. Despite the relative dearth of evidence on 'ABD', there is of course a need to offer guidance to emergency services about the appropriate management of people who are extremely agitated and who may be at risk of a physical health emergency. Patients presenting in this way can pose a very real danger to themselves, staff and other people around them, and require quick decision making on the part of emergency call handlers, police officers, paramedics and pre-hospital clinicians, and emergency department staff. Given the literature which suggests a high risk of sudden death and the potential for interventions such as prone restraint to worsen prognoses, emergency services staff are understandably anxious to ensure their policies and practices are based on the best scientific evidence available.

There may also be a practical value to a short hand term which enables different services to quickly communicate that a person who is behaving in a troubling and agitated way may be at risk of physiological deterioration. In this vein, it is encouraging to see the efforts of police and ambulance services to use the label 'ABD' to prompt a health-based approach and ensure faster response times so that those patients experiencing a physical health emergency receive the best possible standard of care. Similar efforts are also underway for improving cardiac care through shared terminology and training across services.

However, it is vital that this terminology does not undermine effective clinical management by creating the impression of a distinct diagnostic entity or the false impression of However, it is vital that this terminology does not undermine effective clinical management by creating the impression of a distinct diagnostic entity or the false impression of an imminent physical health emergency where this is not the case. While the Royal College of Psychiatrists fully recognises that the acuity of the situation means that emergency services may have to contain someone until investigations can take place, it is concerned about any terminology which might prevent appropriate consideration of the cause of a patient's behaviour, any differential diagnoses (e.g. sedative withdrawal states, delirium tremens, organic psychosis, infection, brain trauma etc.) and the impact of characteristics such as young or advanced age on the patient's presentation and management approach.

Patients and carers consulted during the development of this position statement welcomed terminology which prompted a health-based response to people who are in distress and may be at risk of a physical health emergency. However, they expressed their concern that current guidance and literature is often dehumanising in that it fails to recognise how distressing the experience will be from the patient's perspective. They therefore recommended a focus on 'distress' rather than 'behavioural disturbance' as a clinical diagnosis. The fact that broad and subjective signs and symptoms are being used to define 'ABD' also raised fears that the terminology could be used to justify inappropriate physical or chemical restraint, and to avoid appropriate accountability where these interventions led to injury or death.

> **Medical emergencies have to be recognised and responded to in a health-based way, so in that way I can see how 'ABD' can be helpful. But we need terminology that emphasises that this is a person who is scared and needs help and doesn't suggest there's a diagnosis.**
>
> — Quote from patient and carer workshop

In this context, the Royal College of Psychiatrists therefore recommends:

- 'ABD' should never be used as a diagnosis or cause of death. This needs to be explicitly stated in all guidance, to a wide range of professional groups involved in patient care and any investigation following a death. 'ExD' should never be used.

- Alternative terminology which moves away from the suggestion of a distinct diagnostic entity should be urgently sought, drawing on the broader evidence-base around agitation and physiological deterioration. An adjectival description such as a "severely agitated person in distress" might offer an alternative shorthand for emergency services which humanises the person affected and carries no implication of a distinct diagnosis or cause of death. Any change in terminology should be agreed by consensus, to ensure vital consistency across services.

- Guidance and training offered on the management of people who are agitated, distressed and may be at risk of a physical health emergency should explicitly recognise the scientific uncertainty surrounding concepts of 'ABD'.

Guidance on the management of acute disturbance

The means by which professionals can ensure the safety of a severely agitated person in distress who is at risk of a physical health emergency is largely determined by the stage of the patients' clinical progression and the environment in which the patient is being treated. As a result, guidance for the management of these presentations will vary significantly between psychiatric inpatient settings and emergency departments or public spaces. Given the significant uncertainty that exists around concepts of 'ABD' and the broad range of presentations which may be labelled in this way, the Royal College of Pyschiatrists is nonetheless of the view that evidence-based psychiatric guidance provides a potentially valuable framework for guidance on the management of extreme agitation and distress across a range of settings.

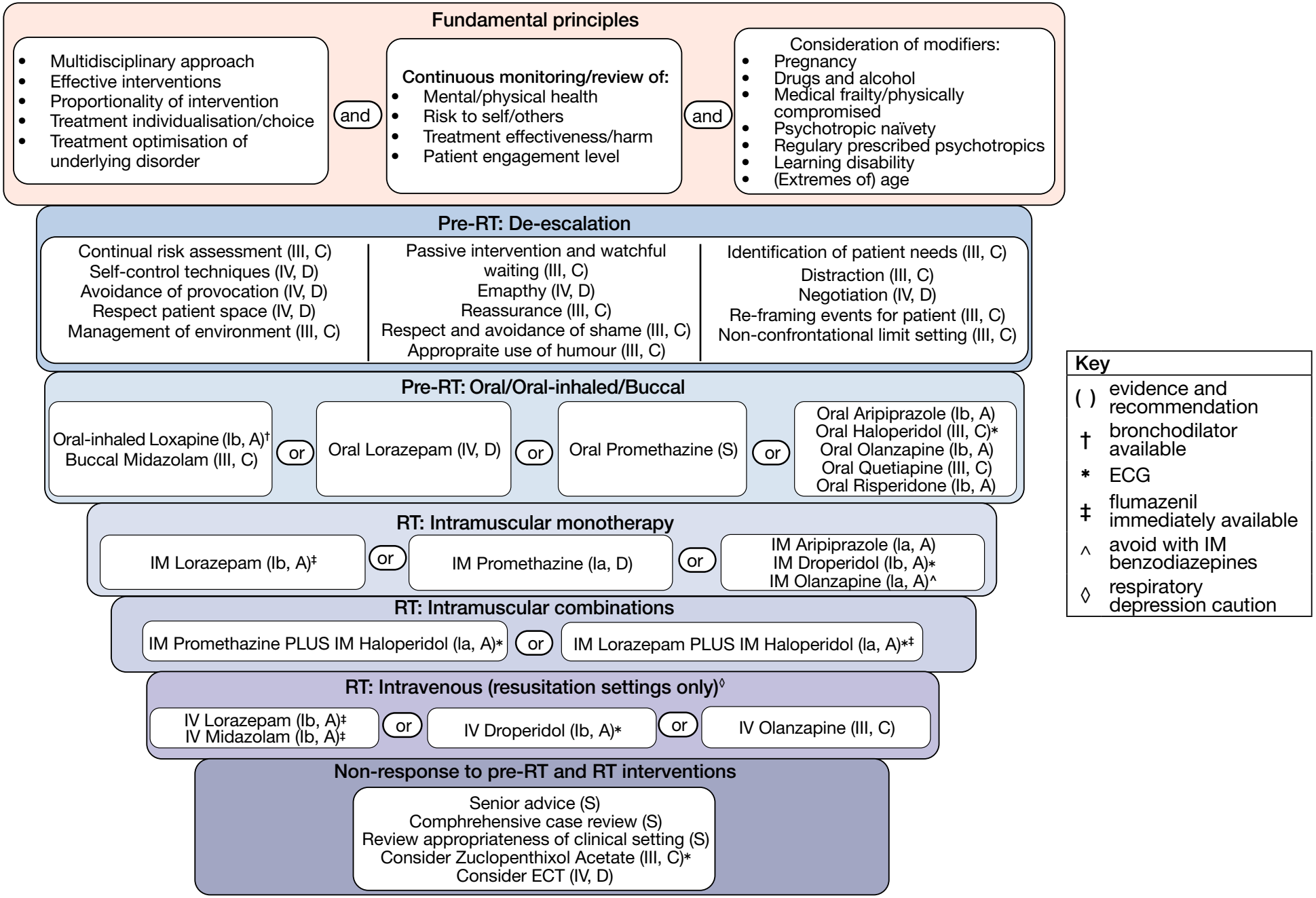
Current definitions can encompass a very broad range of patient presentations but much of the clinical guidance offered for the management of 'ABD' focuses only on the most severe cases which have progressed to a state of physical dysregulation, most often in the form of a state of autonomic hyperarousal – the very final stages of any potential "final common pathway". (Stevenson R and Tracy D, 2021). While reference is often made to the importance of attempting verbal de-escalation, little guidance is offered on this, and frontline professionals are asked to make high-risk judgements about the application of restraint and rapid tranquilisation without a clear framework to assess individual patients' relative risk of a physical health emergency. Given limited awareness and the wide range of professions expected to assess risk and respond accordingly, greater clarity and consistency should be sought.

Current consensus guidelines on the management of acute disturbance in psychiatric settings offer a potentially helpful solution to this challenge, by setting out more explicitly graded guidance for patients at different stages of clinical progression, including what signs and symptoms are known to indicate any physiological deterioration [see Figure 1 on p. 32] (Patel, Sethi et al., 2018).

Given their potential application to a much wider range of patients, including those not at risk of a physical health emergency, guidance and training should be expanded to include the assessment of relative risk and effective de-escalation techniques for people in distress. This includes specific guidance on how to accurately assess physical symptoms in people with intellectual disabilities to avoid still too pervasive 'diagnostic overshadowing' in the assessment and treatment of this vulnerable population. This could prove critical to ensuring patients who are at risk of an imminent health emergency are accurately identified, while also ensuring that patients whose needs would be best met through de-escalation and support from a specialist mental health crisis team are not subjected to entirely avoidable and potentially harmful physical or chemical restraint.

The challenges surrounding the precise definition of 'ABD' signs and symptoms could also be addressed by drawing on well-established red flags to identify patients who are physically deteriorating across different settings. Systems such as the National Early Warning Score (NEWS) already have substantial overlap with case definitions of 'ABD', but are scientifically validated and less prone to subjective bias.

Figure 1: An algorithm for the management of acute disturbance (Patel, Sethi et al. 2018, p. 34).



Moving from a criterion-based approach to severe agitation and distress towards a red-flag system to trigger adjusted restraint techniques and rapid transfer to an emergency department would help ensure this presentation is not viewed as a binary diagnosis or conflated with controversial literature on 'ExD'. Such red flags might include tachypnoea (rapid breathing) and hyperthermia, with sweating that is disproportionate to the ambient temperature and removal of clothing as potential proxies for the latter.

The triad model proposed by the Faculty of Forensic & Legal Medicine of the Royal College of Physicians might offer one such framework, provided it is not accompanied by reference to unvalidated criteria drawn from 'ExD' specific literature and there is guidance on assessing "extreme" agitation so as not to encompass distress without physiological deterioration.

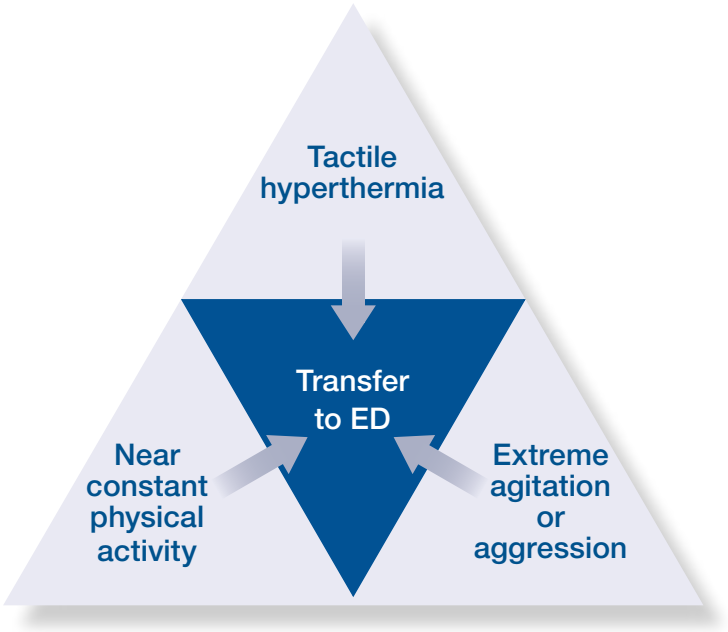


Figure 2: FFLM Triad Model (Faculty of Forensic & Legal Medicine of the Royal College of Physicians, 2019).

While recognising that people who are severely agitated due to an underlying physical or mental health condition, this would also align with broader guidance on managing the risks of restraint for all people. It is always vital that all potential avenues to avoid restraint are exhausted prior to it being used, but this is particularly so in the case of a potential underlying physical health emergency that would be significantly exacerbated by restraint.

Considerable work has also been done in recent years to reduce restrictive practices across mental health service, and to make them safer when used. This work was prompted by a series of tragic and avoidable deaths of patients subjected to unreasonable, unjustified and dangerous levels of force in mental health services (CQC, 2018). Experience across psychiatric practice has consistently shown prone restraint to be dangerous (CQC, 2018). As a result, both best practice guidance and legislative frameworks have been revised considerably (NICE, 2020). The most recent example of this is the Use of Force (Mental Health Units) Act 2018 ('Seni's Law'), which will come into force in 2022 and increase protections and oversight on the use of force in mental health settings (UK Government, 2018). Drawing on the psychiatric evidence base around safe restraint could also strengthen best practice guidelines and training for frontline staff across emergency services.

Patients and carers contributing to this position statement emphasised the long-term trauma they experienced following restraint and rapid tranquilisation. They also described the challenges they faced in gaining access to clear information about their treatment, why certain interventions had been deemed necessary and whether this had been proven to be the right response. Lessons could therefore also be drawn from the psychiatric guidance which emphasises the importance of consistent communication with patients during the application of any restraint as well as proper patient follow-up. Patients subject to restraint and rapid tranquilisation are extremely fearful and often cannot understand what is happening to them in the moment, making communication and follow-up vital to helping them understand and process their experience and have a sense of hope for their recovery (Patel, Sethi et al., 2018).

> **People don't understand how traumatising restraint and sedation are – it's a violation that is very difficult to get over. I still deal with the mental scars from these experiences and have found it really difficult to get any information or support from services after the events.**
>
> — Quote from patient and carer workshop

Further insight may also be drawn from the psychiatric evidence-base on administering high-dose antipsychotic agents (Royal College of Psychiatrists Psychopharmacology Committee, 2017). While the use of agents such as ketamine may indeed be necessary and safer than benzodiazepines, antipsychotics or prolonged restraint, it is vital that the decision to administer these drugs is made by qualified staff with full knowledge of the potential risks and contraindications. This is particularly the case for patients in certain risk groups, such as older and frail people, very young patients, people who are likely to have taken anti-psychotic medication in the past, and those with substance intoxication or withdrawal (Patel et al., 2018; Temmingh et al., 2020; Arendts G and Hullick C, 2021). Guidance should include explicit discussion of this and the need for further research to support effective clinical decision making and ensure interventions can be fairly scrutinised in the event of an adverse outcome.

In this context, the Royal College of Psychiatrists therefore recommends:

- Professional bodies across police, ambulance, emergency medicine and mental health should collaborate in the development of aligned, cross-disciplinary guidance for all professionals engaged in the care of severely agitated and distressed persons.

- Joint protocols and integrated services are strengthened to better meet the needs of patients with concomitant (naturally accompanying/associated) mental and physical health needs, including those requiring urgent care.

- Guidance on the management of severe agitation should:

    - offer a red-flag system to identify individual patient's risk of physical deterioration and set out appropriate management strategies.

- include specific guidance on verbal and environmental de-escalation, including seeking specialist mental health support wherever possible.

- Guidelines on safe restraint should:

  - emphasise the greater risk of physiological deterioration for severely agitated people, setting out red flags which indicate that a person subject to restraint is deteriorating physically.

  - clearly set out the importance of compassionate communication and processes for appropriate patient follow-up.

  - emphasise the importance of clinical leadership, setting out guidance on how services should work together, collect data and regularly conduct multi-disciplinary reviews of outcomes and quality of care.

Responding to the societal context

It is not possible to have discussions about 'ABD' without acknowledging the societal context in which the concepts and associated guidance are applied. While reference to highly subjective criteria such as 'superhuman strength' or 'insensitivity to pain' when defining a de-facto diagnostic category are problematic in and of themselves, the way in which these play into racist stereotypes pose a real risk for people from ethnic minority backgrounds.

> **You can't remove concepts like 'ABD' from their societal context – we know that people of colour face more violence in public services, so any terminology that can be used to avoid accountability is a massive problem.**
>
> — Quote from patient and carer workshop

A person's past experience of interacting with police and health services –as an individual and in their community more broadly – will have a significant impact on their response to de-escalation and restraint by emergency services, including their level of stress and struggle in these circumstances. Likewise, racist stereotypes can skew how emergency service staff may interpret the behaviour of someone of another ethnic background.

> **Efforts at de-escalation don't take the individual into account enough. My experience of racism and sexual assault have a massive impact on how I experience interactions with emergency services. If you're supporting someone with learning difficulties, for example, your approach needs to take account of that.**
>
> — Quote from patient and carer workshop

Guidance on de-escalation, identifying patients at risk of a physical health emergency, restraint, rapid tranquilisation and patient follow up must consider these factors to ensure the needs of all patients, regardless of their ethnic background, are met.

In this context, the Royal College of Psychiatrists recommends:

- Subjective and potentially racialised criteria should be removed from clinical guidance. This includes criteria such as 'superhuman strength' and 'insensitivity to pain'.

- Staff are prompted to reflect on potential biases and how these play into both their own perceptions of a situation and a patient's experience of interventions.

- All data collection and research on 'ABD' should include data disaggregated by protected characteristics.

6. Conclusion

People working across police services, ambulance services, in emergency departments, acute hospitals and mental health services must work together to ensure the safety and wellbeing of people who become severely agitated and distressed. Some of these people may be at risk of a physical health emergency without medical assistance, and many will see their condition worsen when subjected to restraint. These presentations can be incredibly challenging for staff to manage, given that people may present a risk of harm to themselves, staff and members of the public. It is vital that staff are supported with clear and evidence-based guidance, including on how to recognise the signs of a physical health emergency, and that systems are in place to ensure an expedited health-based response.

People who experience these episodes of severe agitation are often very distressed and frightened. When services are supported in recognising and responding to their needs appropriately, many can recover without the need for physical or chemical intervention. Where physical or chemical restraint must be used to keep them safe, doing this in an evidence-based, compassionate, and controlled manner is critical to improving patient outcomes.

Terminology which suggests or infers a diagnosis where there isn't one, or where there is insufficient evidence to support this claim, can undermine effective clinical management. It can also undermine effective scrutiny, accountability and lesson-learning following a patient's death by suggesting that an unsubstantiated underlying condition was the primary cause of death, thereby minimising the role of restraint or other interventions in contributing to this outcome.

This position statement has considered the current terminology used to describe these patient presentations. In the context of an evidence-base that remains limited, it has explored this terminology's risks and benefits, and how risks might be mitigated, including through a potential change in terminology. Drawing on the evidence base from psychiatry, it has set out potential ways of strengthening guidance to ensure all people who present in an extremely agitated and distressed way receive the best possible standard of care.

The management of these patient presentations is necessarily cross-disciplinary. In the absence of a wealth of evidence, a consensus is urgently needed across professional bodies responding to people who present in this way to ensure alignment in terminology, guidance, and training. The Royal College of Psychiatrists hopes to build on the views set out in this position statement, working with experts across different professions to develop this consensus for the benefit of service users.

Annex

The below table provides a list of police-contact related deaths where either 'ABD' or 'ExD' have been referenced as part of IOPC investigations and/or inquests, since 2005. It combines a list compiled by the IOPC and published as part of Dr Meng Aw-Yong's Ormrod Lecture in 2019, and supplemented by further online research and correspondence with the charity INQUEST. Due to variation in the terminology used and difficulty in accessing relevant records, it is very likely non-exhaustive.

The cases below underline the need for an improved consensus on this topic. In many cases, concerns have been raised about restraint having been the precipitative cause of the physiological deterioration, and coroners have frequently criticised services' failure to recognise and respond to the medical emergency.

Date and location of death	Name	Date of Inquest (if known)	Inquest findings/summary
06/08/2005 London	Paul Coker	Jan 2010	Inquest highlighted lack of communication, inadequate police training in identifying medical emergency of ED/'ABD' (Garden Court Chambers, 2010).
11/01/2006 South Wales	Paul Evans		(Aw-Yong M, 2019)
30/06/2007 Lancashire	Nadeem Khan		Inquest narrative notes failure to recognise ED, deal as med emergency (BBC News, 2010).
2008 London	Ricky Penfold		Cause of death found to be non-dependent abuse of cocaine, which triggered an episode of excited delirium aggravated by restraint (Macfarlane M, 2010).
2009 Shropshire	Jason Pearce	July 2011	Cause of death: drug intoxication, excited delirium, insufficient training on ExD (Shropshire Star, 2011).
23/04/2009 South Wales	Leigh Roberts		(Aw-Yong M, 2019)

Date and location of death	Name	Date of Inquest (if known)	Inquest findings/summary
10/06/2010 Avon and Somerset	James Herbert	2013	Inquest narrative notes "intoxicated by synthetic cathinones", "struggled violently against necessary restraint" (Independent Police Complaints Commission, 2017).
11/09/2010 Durham	Leonard McCourt	Nov 2012	Inquest notes failure to provide adequate first aid and monitor (Angioloni E, 2017).
04/09/2010 London	Olaseni Lewis	June 2017	Inquest found "unnecessary and unreasonable" use of force contributed to death. Narrative notes insufficient training on 'ABD', assumed by police to be a formal diagnosis made by medical staff (Lynch S, 2017).
31/03/2011 Birmingham	Kingsley Burrell	May 2015	Inquest notes prolonged and brutal restraint by police and a failure by medical staff to provide basic care – 'ABD' mentioned in narrative (INQUEST, 2015).
17/04/2011 Cleveland	Kirk Williams	Nov 2014	Cause of death noted as excited delirium and coronary artery atheroma and left ventricular hypertrophy. Narrative concluded that he should have been taken to hospital sooner (Faulks S, 2014).
22/08/2011 Cheshire	Jacob Michael	Oct 2012	Inquest notes "ineffective" police training (Aw-Yong M, 2019). Home office pathologist found 'excited delirium' as cause of death (Malik S, 2012).
01/10/2011 Cheshire	Mark Law		(Aw-Yong M, 2019)

Date and location of death	Name	Date of Inquest (if known)	Inquest findings/summary
18/04/2011 London	Michael Sweeney	Sept 2013	Medical cause of death: acute toxic effects of cocaine, restraint and struggling in association with 'acute behavioural disturbance' (Hassell ME, 2013).
28/02/2012 Merseyside	Antony Hughes	Dec 2013	Inquest records as drug-related death, narrative notes lack of training on ExD and role of restraint (Barlow E, 2013).
13/11/2013 Surrey	Terrence Smith	Feb 2018	Medical cause of death: multiple hypoxic organ failure, cardiorespiratory collapse, amphetamine-induced excited delirium in association with restraint (Travers R, 2019).
06/07/2013 Kent	Sean Wilkes	Nov 2017	IPCC recommendations on refresher training on early identification of when someone should be treated as a medical emergency (BBC News, 2017).
05/05/2013 London	Darren Neville	June 2015	Cause of death linked to cocaine and prolonged restraint (Aw-Yong M, 2019).
5/11/2013 London	Leon Briggs	October 2021	Medical cause of death noted as amphetamine intoxication in association with prone restraint and prolonged struggling, and ischaemic heart disease (Whitting E, 2021).
27/07/2014 London	Michael Vital		(O'Connor M, 2015; Aw-Yong M, 2019).
29/07/2014 London	Duncan Tomlin	April 2019	Medical cause of death noted as cardiorespiratory failure due to both restraint in a prone position and the effects of a combination of drugs, contributed to by neglect (INQUEST, 2019b).
28/08/2014 Essex	Andrew Moore		(Aw-Yong M, 2019)

Date and location of death	Name	Date of Inquest (if known)	Inquest findings/summary
31/01/2015 Dyfed Powys	Meiron James	Jan 2019	Inquest finds cause of death to be positional asphyxia, notes excessive restraint (Aw-Yong M, 2019; INQUEST, 2019c).
3/05/2015 Kirkaldy	Sheku Bayoh	Public Inquiry Ongoing	Police Federation lawyer has suggested link with 'ABD' (Scottish Government, 2020).
June 2015 London	Joseph Phuong	Sep 2017	Medical cause of death unascertained, but notes 3-hour restraint (Aw-Yong M, 2019; Grierson J, 2017).
09/10/2015 London	Gabriel Frapiccini	Sep 2016	Inquests finds "accidental death", notes restraint by MOP and police (Aw-Yong M, 2019; Crook C, 2016).
14/12/2015 Cheshire	Carl Fullalove		(Aw-Yong M, 2019)
15/11/2015 Merseyside	Tony Grugel	June 2016	Ambulance delay – police transported to emergency department (Thomas J, 2016).
19/09/2015 Nottinghamshire	Ranjit Johal		(Aw-Yong M, 2019; Wired-Gov.net, 2017).
13/07/2016 Merseyside	Mzee Mohammed	Nov 2019	Inquest concluded death of 'natural causes' from cardiorespiratory arrest and acute psychotic episode (INQUEST, 2019a).
13/09/2016 Huddersfield	Andrew Hall	June 2021	Police use of force found to have been "justified" (Fallon, C 2021), with inquest listing "symptoms of acute behavioural disturbance" as part of cause of death"[3].
12/04/2017 Dorset	Douglas Oak	Oct 2019	Prevention of future deaths report highlights need for better training on 'ABD' (Griffin RC, 2019).

3 Communication with INQUEST, 2021.

Date and location of death	Name	Date of Inquest (if known)	Inquest findings/summary
23/05/2017 Devon & Cornwall	Marc Cole		Cause of death: use of cocaine, episode of altered behaviour including self-harm, exertion, excitement, the use of x26 taser device and restraint (Williams GU, 2020).
19/07/2017 Warwickshire	Darren Cumberbatch	June 2019	Excessive use of force contributed to death. Prevention of future deaths notes failure to recognise and manage suspected 'ABD' (Delroy H, 2019).
09/03/2018 London	Kevin Clarke	Oct 2020	Cause of death noted as "Acute Behavioural Disturbance (in a relapse of schizophrenia) leading to exhaustion and cardiac arrest contributed to by restraint struggle and being walked" (Senior Coroner Andrew Harris, 2021).
31/07/2019	Jason Lennon	January 2022	Final inquest noted cause of death as "1a. Cardiorespiratory arrest in association with restraint and acute psychotic episode". This followed legal submissions against the original pathologists' findings of 'cardiorespiratory arrest in association with restraint and 'Acute Behavioural Disturbance' (INQUEST, 2022)."

References

American College of Emergency Physicians (2021) ACEP task force report on hyperactive delirium with severe agitation in emergency settings.

American College of Emergency Physicians (2009) *White Paper Report on Excited Delirium Syndrome: ACEP Excited Delirium Taskforce*. Available at: https://www.prisonlegalnews.org/media/publications/acep_report_on_excited_delirium_syndrome_sept_2009.pdf (Accessed: 30/11/2021).

American Medical Association (2021) *Report 2 of the council of science and public health: use of drugs to chemically restrain agitated individuals outside of hospital settings*. Available at: https://www.ama-assn.org/system/files/2021-05/j21-csaph02.pdf (Accessed: 18/08/2022).

American Psychiatric Association (2020) *Position statement on concerns about use of the term 'excited delirium' and appropriate medical management in out-of-hospital contexts*. Available at: https://www.psychiatry.org/File%20Library/About-APA/Organization-Documents-Policies/Policies/Position-Use-of-Term-Excited-Delirium.pdf (Acessed: 18/08/2022).

Angiolini E (2017) Report of the Independent Review of Deaths and Serious Incidents in Police Custody. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/655401/Report_of_Angiolini_Review_ISBN_Accessible.pdf (Accessed: 30/11/2021).

Arendts G, Hullick C (2021) Droperidol should not be considered first line therapy in acute behavioural disturbance of older patients. *Emergency Medicine Australasia*, **33(2)**: 390–1.

Auth NM, Booker MJ, Wild J, Riley R (2022) Mental health and help seeking among trauma-exposed emergency service staff: a qualitative evidence synthesis. *BMJ Open*, **12**: e047814. doi: 10.1136/bmjopen-2020-047814 (Accessed: 11/06/22).

Aw-Yong M (2019) Ormrod Lecture October 2019: Police restraint – causes of death. *Medicine, Science and the Law*, **60(3)**: 227–33.

Baldwin S, Hall C, Bennell C et al (2016) Distinguishing features of Excited Delirium Syndrome in non-fatal use of force encounters. *Journal of Forensic and Legal Medicine*, **41**: 21–7.

Baldwin S, Hall C, Blaskovits B et al (2018) Excited delirium syndrome ('ExD'S): Situational factors and risks to officer safety in non-fatal use of force encounters. *International Journal of Law and Psychiatry*, **60**: 26–34.

Barlow E (2013) Coroner calls for more police training as man dies after being restrained by officers. *Liverpool Echo*, 9 December. Available at: https://www.liverpoolecho.co.uk/news/liverpool-news/liverpool-man-antony-hughes-died-6388642 (Accessed: 30/11/2021).

BBC News (2010) Lancashire Police failed custody death man. *BBC News*, 7 May. Available at: http://news.bbc.co.uk/1/hi/england/lancashire/8669073.stm (Accessed: 30/11/2021).

BBC News (2017) No misconduct in Sean Wilkes police restraint death. *BBC News*, 27 November. Available at: https://www.bbc.co.uk/news/uk-england-kent-42143140 (Accessed: 30/11/2021).

Beer MD, Pereira SM and Paton C (2001) Psychiatric intensive care. London: Greenwich Medical Media Ltd.

Bell LV (1840) On a form of disease resembling some advanced stages of mania and faver, but so contradistinguished from any ordinary observed or described combination of symptoms as to render it probable that it may be an overlooked and hitherto unrecorded malady. *American Journal of Psychiatry*, **6(2)**: 97–127.

Bell S, Palmer-Conn S, Kealy N (2021) Swinging the lead and working the head – an explanation as to why mental illness stigma is prevalent in policing. *The Police Journal: Theory, Practice and Principles*. doi: https://doi.org/10.1177%2F0032258X211049009 (Accessed: 11/06/22).

Black Thrive (2021) *'ABD': Why Black people will continue to be harmed by the criminal justice and healthcare system.* Available at: https://blackthrive.org/no-place-for-abd/ (Accessed: 30/11/2021).

College of Paramedics (2018) *Position Statement: Acute Behavioural Disturbance*. Available at: https://collegeofparamedics.co.uk/COP/News/Statements%20and%20Consultations/COP/News/Statements_and_consultations.aspx (Accessed: 24/11/2021).

College of Policing (2021) *Detention and Custody: Risk Assessment.* Available at: https://www.college.police.uk/app/detention-and-custody/detention-and-custody-risk-assessment (Accessed: 24/11/2021).

CQC (2018) *The state of care in mental health services 2014 to 2017.* Available online: https://www.cqc.org.uk/publications/major-report/state-care-mental-health-services-2014-2017 (Accessed: 28/03/2022).

Delroy H (2019) Regulation 28: Prevention of Future Deaths Report - Mr Cumberbatch CUMBERBATCH. *Courts and Tribunals Judiciary*. Available at: https://www.judiciary.uk/wp-content/uploads/2019/10/Darren-CUMBERBATCH-2019-0289_Redacted.pdf (Accessed: 30/11/2021).

Department of Health and Social Care (2018) *Modernising the Mental Health Act – final report from the independent review.* Available at: https://www.gov.uk/government/publications/modernising-the-mental-health-act-final-report-from-the-independent-review (Accessed: 30/11/2021).

de Yoanna M, Solomon R (2020) Colorado medics may have misdiagnosed 'excited delirium' hundreds of times when dosing people with ketamine*. KUNC News*. Available at: https://www.kunc.org/2020-09-15/colorado-medics-may-have-misdiagnosed-excited-delirium-hundreds-of-times (Accessed: 30/11/2021).

Dodd, V (2021) Black people more likely to be Tasered for longer, police watchdog finds*. The Guardian*, 25 August. Available at: https://www.theguardian.com/uk-news/2021/aug/25/black-people-more-likely-to-be-tasered-for-longer-police-watchdog-finds (Accessed: 30/11/2021).

Emerson E, Baines S (2010) Improving Health and Lives: Learning Disability Observatory.

Fallon C (2021) Police used 'justified' force on man who died. *Channel 4 News*, 22 June. Available at: https://www.channel4.com/news/police-used-justified-force-on-man-who-died-inquest-jury-finds. (Accessed: 30/11/2021).

Faulks S (2014) Regulation 28 report to prevent future deaths – Kirk William Williams*. Courts and Tribunals Judiciary*. Available at: https://www.judiciary.uk/wp-content/uploads/2014/12/Williams-2014-0499.pdf (Accessed: 30/11/2021).

Forensic Science Regulator and The Royal College of Pathologists (2020) *Issue 2 Guidance: The use of 'excited delirium' as a cause of death.* Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/929746/Excited_Delirium_Guidance_2.pdf (Accessed: 24/11/2021).

Garden Court Chambers (2010) *Highly critical jury verdict condemns the actions of the metropolitan police and the medical treatment and care Paul Coker received in custody.* Available at: https://www.gardencourtchambers.co.uk/news/highly-critical-jury-verdict-condemns-the-actions-of-the-metropolitan-police-and-the-medical-treatment-and-care-paul-coker-received-in-custody (Accessed: 30/11/2021).

Gonin P, Beysard N, Bertrand Y, Carron PN (2018) Excited delirium: a systematic review. *Academic Emergency Medicine*, **25**: 552–65.

Gov.uk (2016) Review of racial bias and BAME representation in criminal justice system announced [Press release]. 31 January. Available at: https://www.gov.uk/government/news/review-of-racial-bias-and-bame-representation-in-criminal-justice-system-announced. (Accessed: 31/08/2022).

Grierson J (2017) Sister of UK man who died in custody hits out over mental health services*. The Guardian*, 11 October. Available at: https://www.theguardian.com/society/2017/oct/11/sister-of-uk-man-joseph-phuong-who-died-in-custody-hits-out-over-mental-health-services (Accessed: 30/11/2021).

Griffin RC (2019) Regulation 28: report to prevent future deaths*. Courts and Tribunals Judiciary*. Available at: https://www.judiciary.uk/wp-content/uploads/2019/11/Douglas-Oak-2019-0352.pdf (Accessed: 30/11/2021).

Hall C, Butler C, Kader As, Palmer S (2009) Police use of force, injuries and death: prospective evaluation of outcomes for all police use of force/restraint using conducted energy weapons in a large Canadian city. *Academic Emergency Medicine*, **16**: 198–9.

Hassell ME (2013) Regulation 28: Prevention of Future Deaths Report Michael James Sweeney*. Courts and Tribunals Judiciary*. Available at: https://www.judiciary.uk/wp-content/uploads/2016/03/Sweeney-2013-0236.pdf (Accessed: 30/11/2021).

Hatten B, Bonney C, Dunne R et al (2021) ACEP Task Force on Hyperactive Delirium with Severe Agitation in Emergency Settings. *American College of Emergency Physicians*.

Helppi A (2021) Excited delirium: what's the evidence for its use in medicine? *BMJ,* **373**: n1156.

Hoffmann K, Trawalter S, Axt J, Oliver N (2016) Racial bias in pain assessment and treatment recommendations, and false believes about biological differences between blacks and whites. *Proceedings of the National Academy of Sciences of the United States of America*, **113(16)**: 4296–301. doi: https://doi.org/10.1073/pnas.1516047113. (Accessed: 06/02/2022).

Hoffman L/Emergency Medicine News (2009) *ACEP recognises excited delirium syndrome.* Available at: https://journals.lww.com/em-news/Documents/ExDS-pdf-final.pdf (Accessed: 30/11/2021).

Independent Police Complaints Commission (2017) *Six missed chances: how a different approach to policing people with mental health problems could have prevented James Herbert's death in custody*. Available at: https://www.policeconduct.gov.uk/sites/default/files/Documents/research-learning/James_Herbert_Six_missed_chances.pdf (Accessed: 30/11/2021).

INQUEST (2019) Inquest concludes death of teenager Mzee Mohammed-Daley following restraint was 'natural cause'*. INQUEST*, 11 December. Available at: https://www.inquest.org.uk/mzee-mohammed-daley-close (Accessed: 30/11/2021).

INQUEST (2022) Jason Lennon: Damning inquest conclusions on restraint by security guards of Black man in mental health crisis*. INQUEST*, 11 February. Available at: https://www.inquest.org.uk/jason-lennon-conclusions (Accessed: 10/06/22).

INQUEST (2019) Jury concludes neglect contributed to death of Duncan Tomlin following police restraint in 2014. *INQUEST*, 9 April. Available at: https://www.inquest.org.uk/duncan-tomlin-jury-neglect (Accessed: 30/11/2021).

INQUEST (2019) Jury finds that excessive restraint resulted in the death of Meirion James in Dyfed-Powys police custody. *INQUEST*, 25 January. Available at: https://www.inquest.org.uk/meirion-james-conclusion (Accessed: 30/11/2021).

INQUEST (2015) Jury return neglect finding at inquest into restraint death of Kingsley Burrell. *INQUEST*, 15 May. Available at: https://www.inquest.org.uk/kingsley-burrel-inquest-closed (Accessed: 30/11/2021).

Joint Royal Colleges Ambulance Liaison Committee (2021) *iCPG: the JRCALC Guidelines* (Version 1.3.12) [Mobile app]. Class Publishing Ltd. Available at: https://apps.apple.com/gb/app/icpg-the-jrcalc-guidelines/id1062577568 (Accessed: 30/05/22) and in print version at: https://aace.org.uk/clinical-practice-guidelines/.

Kutcher S et al (2009) *Report of the Panel of Mental Health and Medical Experts Review of Excited Delirium.* Available at: https://novascotia.ca/just/Public_Safety/_docs/Excited%20Delirium%20Report.pdf (Accessed: 30/11/21).

Lipsedge M (2016) Excited delirium: a psychiatric review. *Medicine*, *Science and the Law* **56(2)**: 121–7.

Lynch S (2017) Report to Prevent Future Deaths – Inquest touching the death of Olaseni Lewis. Available at: https://www.judiciary.uk/wp-content/uploads/2017/07/Olaseni-Lewis-2017-0205.pdf. (Accessed: 30/11/2021).

Malik S (2012) 'Excited delirium' finding in custody death angers parents. *The Guardian*, 1 February. Available at: https://www.theguardian.com/uk/2012/feb/01/excited-delirium-custody-death. (Accessed: 30/11/2021).

Maudsley H (1897) Acute mania and maniacal delirium. *Journal of Mental Science*, **13(61)**: 59–65.

MBRRACE-UK (2020) Saving Lives, Improving Mothers' Care – Lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2017-19. *Oxford Population Health (NPEU)*. Available online: https://www.npeu.ox.ac.uk/mbrrace-uk/reports (Accessed: 06/02/2022).

Macfarlane M (2010) Ricky Penfold inquest verdict. *East London and West Essex Guardian Series*. Available at: https://www.guardian-series.co.uk/news/4996973.ricky-penfold-inquest-verdict/ (Accessed: 30/08/22).

McGuinness T, Lipsedge M (2022) 'Excited delirium', acute behavioural disturbance, death and diagnosis. *Psychological Medicine*, **52(9)**: 1601–11. doi: https://doi.org/10.1017/S0033291722001076.

Metropolitan Police Service (2004) *Restraint & Mental Health Report* (Draft). Available online: http://policeauthority.org/Metropolitan/downloads/committees/mpa/mpa-040930-11-appendix01.pdf (Accessed: 30/11/2021).

National Institute for Health and Care Excellence (NICE) (2015) Violence and aggression: short-term management in mental health, health and community settings, NG10. *National Institute for Health and Care Excellence (NICE)*. Available at: https://www.nice.org.uk/guidance/ng10 (Accessed 30/08/2022).

National Institute for Health and Care Excellence (NICE) (2020) *Restrictive interventions for managing violence and aggression in adults.* Available at: https://pathways.nice.org.uk/pathways/violence-and-aggression/restrictive-interventions-for-managing-violence-and-aggression-in-adults.pdf (Accessed: 28/03/2022).

O'Connor M (2015) Police questioned in mystery death of Holloway man. *Islington Gazette,* 15 October. Available at: https://www.islingtongazette.co.uk/news/crime/police-questioned-in-mystery-death-of-holloway-man-3735662 (Accessed: 30/11/2021).

Patel, Sethi et al (2018) Joint BAP NAPICU evidence-based consensus guidelines for the clinical management of acute disturbance: de-escalation and rapid tranquilisation. *Journal of Psychiatric Intensive Care.* doi: https://doi.org/10.20299/jpi.2018.008.

Parquette M (2003) Excited Delirium: Does it exist? *Perspectives in psychiatric care*, **39(3):** 93.

Crook C (2016) Investigation deems officers not responsible for man's death. *Police Professional*, 9 September. Available at: https://www.policeprofessional.com/news/investigation-deems-officers-not-responsible-for-mans-death/ (Accessed: 30/11/2021).

Raleigh V, Holmes J (2021) The health of people from ethnic minority groups in England. *The Kings Fund*, 17 September. Available at: https://www.kingsfund.org.uk/publications/health-people-ethnic-minority-groups-england (Accessed: 6/02/22).

Rimmer A (2021) Excited Delirium: what's the evidence for its use in medicine? *BMJ,* **373**: n1156.

Royal College of Emergency Medicine (2022) *Acute Behavioural Disturbance in Emergency Departments.* Available at: https://rcem.ac.uk/wp-content/uploads/2022/01/Acute_Behavioural_Disturbance_Final.pdf (Accessed: 06/02/2022).

Royal College of Psychiatrists (2021) *Equality Action Plan.* Available at: https://www.rcpsych.ac.uk/about-us/equality-diversity-and-inclusion/equality-action-plan (Accessed: 06/02/2022).

Royal College of Psychiatrists Psychopharmacology Committee (2017) 2nd Edition College Report CR210: Use of Licensed Medicines for Unlicensed Applications in Psychiatric Practice. *Royal College of Psychiatrists*.

Royal College of Pyschiatrists, Royal College of Nursing, Royal College of Emergency Medicine and Royal College of Phycisians (2020) Side by side: a UK-wide consensus statement on working together to help patients with

mental health needs in acute hospitals. Available at: https://www.rcpsych.ac.uk/docs/default-source/members/faculties/liaison-psychiatry/liaison-sidebyside.pdf (Accessed: 31/08/2022).

Scottish Government (2020) *FOI Request – Correspondence between Scottish Police Federation and Cabinet Secretary for Justice.* Available at: https://www.gov.scot/binaries/content/documents/govscot/publications/foi-eir-release/2021/03/foi-202000111735/documents/foi202000111735---information-released/foi202000111735---information-released/govscot%3Adocument/FOI202000111735%2B-%2BInformation%2Breleased.pdf (Accessed: 30/11/2021).

Senior Coroner Andrew Harris (2021) Regulation 28 report to prevent future deaths - Kevin Clarke*. Courts and Tribunals Judiciary*. Available online: https://www.judiciary.uk/wp-content/uploads/2021/02/Kevin-Clarke-2021-0046-Redacted.pdf (Accessed: 25/11/21).

Shropshire Star (2011) Family issues appeal over Jason Pearce custody death*. Shropshire Star*, 7 July. Available at: https://www.shropshirestar.com/news/2011/07/07/family-issues-appeal-over-jason-pearce-custody-death/ (Accessed: 30/11/2021).

Sickel A, Seacat J, Nabors N (2014) Mental health stigma update: a review of the consequences. *Advances in Mental Health*, **12(3)**: 202–14.

Stevenson R, Tracy D (2021) Acute behavioural disturbance: a physical emergency psychiatrists need to understand. *BJPsych Advances*, **27**: 333–42.

Strommer E, Leith W, Zeegers M, Freeman M (2020) The role of restraint in fatal excited delirium: a research synthesis and pooled analysis. *Forensic Science*, *Medicine and Pathology* **16**: 680–92.

Taylor D, Barnes T and Young A (2021) *The Maudsley Prescribing Guidelines in Psychiatry*, *14th Edition*. Available at: https://www.wiley.com/en-gb/The+Maudsley+Prescribing+Guidelines+in+Psychiatry%2C+14th+Edition-p-9781119772231

Temmingh et al (2020) Methamphetamine use and antipsychotic-related extrapyramidal side-effects in patients with psychotic disorders. *Journal of Dual Diagnosis*, **16(2)**: 208–17.

The Faculty of Forensic & Legal Medicine of the Royal College of Physicians (2019) *Acute behavioural disturbance (ABD): guidelines on management in police custody*. Available at: https://fflm.ac.uk/wp-content/uploads/2019/05/AcuteBehaveDisturbance_Apr19-FFLM-RCEM.pdf (Accessed: 10/06/2022).

Thomas J (2016) Family happy police did "everything possible" after IPCC probe into death of Tony Grugel*. Liverpool Echo*. https://www.liverpoolecho.co.uk/news/liverpool-news/family-happy-police-everything-possible-11418503 (Accessed: 30/11/2021).

Tonkin T (2022) Racism an issue in NHS, finds survey. *British Medical Association*. Available online: Racism an issue in NHS, finds survey (bma.org.uk) (Accessed: 07/02/2022).

Travers R (2019) Re: Terrence Arthur Albert Smith Deceased Regulation 28 Report to Prevent Future Deaths*. Courts and Tribunals Judiciary*. Available at: https://www.judiciary.uk/wp-content/uploads/2019/06/Terence-Smith-2019-0095_Redacted.pdf (Accessed: 30/11/2021).

UK Government (2018) *Mental Health Units (Use of Force) Act 2018.* Available online: https://www.legislation.gov.uk/ukpga/2018/27/enacted (Accessed: 28/03/2022).

United Nations High Commissioner for Human Rights (2021) *Report: Agenda towards transformative change for racial justice and equality.* OHCHR | Report: Agenda towards transformative change for racial justice and equality (Accessed: 30/11/2021).

Wetli CV, Fishbain DA (1985) Cocaine-induced psychosis and sudden death in recreational cocaine users. *Journal of Forensic Sciences*, **30**: 873–80.

Whitting E (2021) Regulation 28 report to prevent future deaths – Leon Briggs. *Courts and Tribunals Judiciary*. Available at: https://www.judiciary.uk/wp-content/uploads/2021/10/Leon-Briggs-Prevention-of-future-deaths-report-2021-0330_Published.pdf (Accessed: 30/11/2021).

Williams GU (2020) Regulation 28: Report to prevent future deaths RE: Marc Antony Cole*. Courts and Tribunals Judiciary*. Available at: https://www.judiciary.uk/wp-content/uploads/2020/04/Marc-Cole-2020-0087-Redacted.pdf (Accessed: 30/11/2021).

Wired-Gov.net (2017) Nottinghamshire police officers acted appropriately prior to death of Ranjit Johal. *Wired-Gov.net*, 26 May Available at: https://www.wired-gov.net/wg/news.nsf/articles/Nottinghamshire+Police+officers+acted+appropriately+prior+to+death+of+Ranjit+Johal+26052017151000?open (Accessed: 30/11/2021).

Zhan X, Carabello M, Hill T, Bell S, Stephenson R, Mahajan P (2020) Trends of racial/ethnic differences in emergency department care outcomes among adults in the United States from 2005 to 2016*. Frontiers in Medicine*, **7**. doi: https://doi.org/10.3389/fmed.2020.00300