



**MEDICATIONS IN DRUG TREATMENT:
TACKLING THE RISKS TO CHILDREN
ONE YEAR ON**



Adfam

Families, drugs and alcohol

Acknowledgements

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Contents

| | |
|---------------------------------------------------------|-----------|
| Foreword | 04 |
| Introduction | 06 |
| Section One: Assessing impact, measuring change | 10 |
| Section Two: Estimating the scale of the problem | 27 |
| Section Three: Serious Case Reviews | 43 |
| Section Four: A follow-up of the recommendations | 51 |
| Section Five: Conclusions and recommendations | 55 |
| Bibliography | 60 |
| Appendix | 64 |

Foreword

This report builds on our previous work, *Medications in Drug Treatment: Tackling the risks to children*, in considering the risks posed to children from substitute drugs prescribed to those struggling with opioid addiction – and proposing steps for minimising these risks. In the foreword to last year’s report I posed the question: ‘On a systemic level, are we doing all that we can to make sure these incidents don’t keep happening?’ I answered that question with a no; unfortunately, I must offer the same response this time around too. Of course, a year is not a long time to effect or even observe system change, and we have found some examples of encouraging practice and attitude at a local level.

It should go without saying that the death of any child is a human tragedy. Reports and investigations triggered by these tragedies, from the expansive Laming report following the murder of Victoria Climbié to the serious case reviews (SCRs) considered in this document, generally highlight a systemic and cultural failure from services which have not worked closely enough with each other in safeguarding vulnerable children.

There is an aphorism from the world of business management – ‘culture eats strategy for breakfast,’ which I believe has some relevance here. We have found some encouraging examples of new practice in local areas – for instance specialist midwives in drug services, and joint-working protocols between drug services and health visiting teams – which have clearly been

driven by an understanding of the strategic complexity of safeguarding children. Hopefully these sound strategic decisions will translate into an everyday working culture of professional curiosity and healthy scepticism, which we believe is essential in achieving the aim of protecting children from risk.

The new statistics are shocking. The scale of the issue is much larger than originally anticipated. Our report last year identified 23 incidents of ingestion and 17 child deaths between 2003 and 2013; mortality data and hospitalisation data uncovered since show the real number of ingestions to be in the hundreds, and the number of deaths over 100. This more realistic estimation adds weight and urgency to the policy and practice recommendations in the original report; all of which still stand.

In any debate on this matter it’s important to keep sight of the fact that OST is an effective intervention with a substantial evidence base, both clinical and anecdotal; and the vast majority of those who use it do so safely and appropriately. Similarly, the majority of practitioners working to facilitate recovery and safeguard children are highly competent and passionate individuals, doing their best in a time of financial and structural constraint.

By the end of 2015, Adfam will have worked with multi-agency teams in 19 local authorities to develop joined-up and strategic approaches to better protect children whose parents or carers

use OST medications. This has been extremely valuable in terms of both uncovering (and sharing) good practice, and together identifying areas for development. It is my hope that this practical but strategic work at a local level combined with the learning in this report will be a positive force in preventing some of these all too familiar future tragedies from occurring.

Vivienne Evans OBE

Chief Executive

Introduction

This 'One Year On' report expands upon the findings and recommendations of Adfam's Medications in *Drug Treatment: Tackling the risks to children*, published in 2014, and further contributes to the debate on reducing the risks to children posed by prescribed medications used in opioid substitution therapy (OST).

Key findings:

- At least 110 persons aged 18 and under died from ingesting OST medications between 2003 and 2013: 73 in England and Wales, and 37 in Scotland
- 107 of these were related to methadone, and three to buprenorphine
- Of the 73 deaths in England and Wales, only seven resulted in a serious case review; meaning that an additional 66 deaths did not
- Hospitalisation statistics show that between 2003 and 2014, at least 328 children were hospitalised in England due to methadone poisoning
- These data reveal that the majority of ingestions occur in adolescents, which is contrary to the bias towards younger children evident in serious case reviews
- Since the original report's publication, there have been three new serious case reviews (one awaiting publication) involving child ingestions of methadone; all of which involved children aged two and under, with the methadone prescribed to the mother

- Evidence suggests that methadone is related to a higher mortality risk than buprenorphine
- A range of approaches are being taken by different local authorities to tackle the issue; yet, the continuation of SCRs where children have come to harm or died after ingesting OST medications means more needs to be done to effectively minimise and manage the risks to children posed by these medications.

Medications in Drug Treatment: Tackling the Risks to Children was published by Adfam in April 2014.¹ The report examined cases where children had ingested medications prescribed for the treatment of opioid dependence, and made policy and practice recommendations to effectively safeguard children and minimise this risk. It revealed that in the period under review (2003-2013), 17 children died and a further six were seriously harmed after ingesting medications used in opioid substitution therapy (OST). A literature review was undertaken to seek available evidence and guidance on the issue, and the research was further informed by a number of consultations with practitioners from the drug treatment, health and social care sectors. The report was launched in Parliament the same month, with speakers including Adfam staff, Meg Munn MP, a GP and a member of a Local Safeguarding Children's Board (LSCB). It was extensively promoted and publicised, and generated interest from both mainstream media outlets and sector press. The findings and recommendations of the report

¹ This will hereon in be referred to as the 'original report' or simply Medications in Drug Treatment

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were much welcomed by practitioners across the board, who recognised a gap in knowledge and understanding of the issues, and were keen to improve practice on the ground.

Being determined to inspire and drive real change in policy and practice to significantly reduce the risks to children posed by OST medications, Adfam worked with four pilot local authorities in September 2015 to help them develop an action plan to enhance local practice, in keeping with the report's recommendations. Following the pilot, this offer of training was extended to local authorities across the country. Progress on this work, based on the six recommendations of the original report, is set out later in this document.

The purpose of this 'One Year On' report is to:

1. Describe and assess the progress made in implementing the recommendations of the original report, since its publication in April 2014
2. Provide practice examples from services which have taken steps to address the issue
3. Provide updated information, data and evidence
4. Outline Adfam's progress in relation to disseminating and championing the recommendations of the original report
5. Provide a follow-up to the original report's recommendations: expanding on the issues identified in the original report and making new recommendations to address them.

² At the time of request, information on the number of child deaths for the year 2013 was unavailable.

³ In Wales, these are referred to as 'child practice reviews,' in Scotland, 'significant case reviews,' and in Northern Ireland, 'case management reviews.' Despite differing terminology, the stipulations for conducting a review are identical i.e. that a child has died or come to serious harm and abuse or neglect are suspected or known to have been involved.

Methodology

The information included in this report is taken from a range of sources:

- A literature review provided updated information, data and further evidence
- Data on the number of child deaths related to OST medications in England and Wales between 2003 and 2013 was obtained from the Office for National Statistics (ONS)
- Data on the number of child deaths related to OST medications in Northern Ireland between 2003 and 2012² was obtained from the Northern Ireland Statistics and Research Agency (NISRA)
- Data on the number of child deaths related to OST medications in Scotland between 2003 and 2013 was obtained from the National Records of Scotland (NRS)

'People need to be more aware of the dangers that methadone can pose to children..This new report will play a valuable role in raising awareness of these cases, and pushing for a more effective approach to prevention.'
Meg Munn MP



- The full reports of the Blackpool ‘Child BT’ (2015) and the Oxfordshire ‘Child H’ (2014) serious case reviews (SCRs)³ were obtained from the respective LSCB websites
- Media reports were sourced for other cases
- Seven treatment services provided evidence and information on their current local and organisational policies and practice around OST and safeguarding, and of changes implemented in response to the findings of the original report
- Four local authorities which had experienced a SCR responded to requests for information regarding the progress made following a SCR involving a child’s ingestion of OST.

Background

OST is a medical intervention whereby long-acting opioid medications (primarily methadone or buprenorphine) are prescribed in replacement of illegal opioid drugs (such as heroin), with the purpose of reducing or preventing withdrawals, providing an opportunity to stabilise drug use and lifestyle, promoting a process of change in drug taking and risky behaviours, helping maintain contact and offering an opportunity for therapeutic work with a client.⁴ OST can enable people to become free from dependence on illicit substances, and provide opportunities to pursue recovery goals, such as employment or education. It has been found to decrease drug use and mortality, inspire high retention rates, improve quality of life,⁵ reduce crime

and limit the spread of blood-borne viruses.⁶

The aim of this research is not to analyse or denounce the role of OST in treating opioid dependence generally: the evidence overwhelmingly shows that it is a valuable and effective tool in helping people overcome addiction. However, OST medications can present unique risks to children as compared to other drugs, including the chance of unsafe storage in sometimes chaotic households, the possible attractiveness of methadone to children,⁷ its real – albeit rare – use as a pacifier and its level of toxicity to children and opioid naïve adults, even in very small quantities.

The National Institute for Health and Care Excellence (NICE), in Technology Appraisal 114, stated that decisions on which medication to prescribe should ‘*take account of the person’s lifestyle and family situation (for example whether they are considered chaotic and might put children and other opioid-naïve individuals living with them at risk)*,’ having recognised the high mortality risk associated with methadone, particularly in opioid-naïve people.⁸ OST can be prescribed for take-home use or on a ‘supervised consumption’ regime, whereby service users⁹ are required to take the medication in the presence of a health professional, such as a pharmacist. Clinical guidance recommends that everyone should be placed on a supervised consumption regime for at least the first

⁴ Advisory Council on the Misuse of Drugs (2014) *Time limiting opioid substitution therapy*

⁵ Pihkala & Sandlund (2015) ‘*Parenthood and opioid dependence*,’ *6 Sub Abuse and Rehab* 33

⁶ Reimer et. al. (2016) ‘*The Impact of Misuse and Diversion of Opioid Substitution Treatment Medicines: Evidence Review and Expert Consensus*,’ *22(99) Eur Addict Res* 106 (Available first online)

⁷ *Methadone often comes as a green, sweet-tasting liquid.*

⁸ National Institute for Health and Care Excellence (2007) *Technology Appraisal 114: Methadone and buprenorphine for the management of opioid dependence*

⁹ *The terms ‘client’, ‘patient’ and ‘service user’ will be used interchangeably throughout.*

three months of prescribing, with relaxation (i.e. a reduction in supervised doses and an increase in take-home prescriptions allowed) over a period of time, to reflect the client's compliance with treatment.¹⁰

The Department of Health, in emphasising that prescribing arrangements should aim to reduce risks to children, has suggested that supervised consumption is the '*best guarantee*' the medicine is used as directed, and advises against take-home doses where there are concerns over the safe storage of medications at home, '*or potential risks to children.*'¹¹ Despite such unambiguous guidance, findings from the original report suggested that safeguarding children from the risks posed by OST medications was failing to be sufficiently prioritised and addressed in practice.

Key findings from the original report

1. OST has a rightful place in a recovery-orientated treatment system, and the majority of people who need and use OST do so safely
2. OST medications can present risks to children that other prescription drugs do not i.e. toxicity in very small doses, possible attractiveness to children, chance of unsafe storage in chaotic households and the proven use of methadone as a pacifier
3. The risks to children posed by OST medications are not sufficiently managed and minimised in practice
4. Serious Case Reviews did not result in sustainable local improvements
5. There is a clear knowledge gap in relation to child ingestions of OST and the true number of incidents is unknown
6. Service users and professionals are sometimes not fully aware of the dangers that OST drugs can pose to children
7. Professionals should be supported to assess risk in families where parental substance use is a factor, and in embedding healthy scepticism and professional challenge into their practice
8. Methadone is involved in substantially more child ingestions than buprenorphine
9. Despite clinical guidelines, safeguarding concerns may not be sufficiently prioritised in

¹⁰ Department of Health (2007) *Drug misuse and dependence: UK Guidelines on Clinical Management*

¹¹ *Ibid*

Section one: Assessing impact, measuring change

Section one: Assessing impact, measuring change

Following the launch of the report, the priority was to disseminate its findings and to build relationships with key organisations and individuals in the substance use, health and social care sectors, as well as national bodies, in order to embed and implement the recommendations. The report was widely disseminated at Adfam events and conferences, third party events and conferences and at meetings with practitioners and organisations. Strategic support was also sought in a number of ways:

- The Association of Independent Local Safeguarding Children Board Chairs was contacted to draw their attention to the specific recommendation regarding the increase in drug service representation on LSCBs, and to secure strategic support generally. Contact was attempted several times. No response was received
- A meeting between Adfam and Public Health England (PHE) was held to discuss how the report's recommendations could be taken forward. PHE was supportive of the work and continue to be kept informed
- Adfam contributed to the Advisory Council on the Misuse of Drugs (ACMD) inquiry into the diversion of medicines, the report of which is due to be published in late 2015
- A submission to the Department of Health's consultation to update the 'Orange Book' (or *Drug misuse and dependence: UK Guidelines on Clinical Management*) was made to highlight the findings and recommendations of the report. This is discussed in *Section Four*.

To improve awareness of the risks to children associated with OST medications and share best practice, Adfam also presented the report's findings and recommendations to over 400 professionals in drug treatment, health and social care, and others. This included:

- Students at Winchester University, BSc Children, Youth and Community Studies programme
- The London Drug and Alcohol Policy Forum
- The Annual General Meeting of SPODA (a family support service in a local authority which has experienced cases of child ingestion)
- Adfam's North West Regional Forum for practitioners supporting families affected by drug and alcohol use
- DrugScope's annual conference 2014
- Drugs & Alcohol Today conference
- Indivior (the report's funders)
- Staff in drug treatment, health and social care in seven different local authorities that contacted Adfam directly to request a presentation.

Evidence of local practice and changes to practice

One of the aims of this report is to examine how the risk of child ingestions of medications used in the treatment of opioid dependence is being addressed locally, with particular attention paid to the implementation of the recommendations of the original report. One of the aims of a SCR is to look at lessons that help prevent similar incidents in the future. *Medications in Drug Treatment* identified a missed opportunity; in that learning from cases was generally restricted to areas where a SCR had taken

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place. The frequency and similarity of the cases suggested that the opportunity for national learning was not being seized, and that the issue lacked national oversight and a coordinated response.

To form a picture of local responses to these cases, requests were made to all local authorities where a SCR had taken place, via the LSCB or local drug treatment provider, to provide information on their current policies and practice and to detail what, if any, changes had been implemented either as a direct result of the incident or after having read Adfam's report. Of the 17 local authorities contacted, four responded with evidence and overviews of their policies and procedures. Further evidence of local practice was obtained from two drug treatment providers that approached Adfam to seek guidance on their materials around safeguarding children from OST, and from several other local authorities and treatment providers with which contact had already been established in connection with the project. The evidence submitted included:

- The four SCR areas that responded to the request for information provided a variety of examples of current practice:
 - » **SCR Area 1** provided an overview of local policy and practice and a copy of their patient safety agreement
 - » **SCR Area 2** provided an overview of local policy and practice
 - » **SCR Area 3** provided an overview of local policy and practice, a copy of the action plan implemented locally in response to a SCR,

practice guidance and an assessment tool for health visitors working with parental substance use and an audit of referrals from the drug treatment provider to health visiting teams

- » **SCR Area 4** provided an overview of local policy and practice
- Two local authorities that had not experienced a SCR were prompted by *Medications in Drug Treatment* to compile briefings, and one developed an action plan for local policy and joint-working as a result
- An overview of local policy and practice was obtained from a local authority that used Bristol's 'Child K' SCR as impetus for reviewing their own ways of working. It also provided an audit sheet, safeguarding checklist, safe storage guidance for service users, safeguarding guidance for practitioners, a patient safety agreement and safe storage box guidance
- A local treatment provider in Wales, which set up a working group in the aftermath of the report's publication, submitted a pro forma letter sent to health visitors by the drug treatment provider, and a checklist used by the provider to assess suitability for take-home medications
- A GP practice provided a copy of their amended patient leaflet, written to address the problem of parental administration, in light of the findings of the report
- One local authority submitted evidence of its policy prioritising buprenorphine prescribing for parents in treatment
- CRI provided details of their home visiting procedure



- Preliminary findings on research into the prevalence of parental administration of drugs to their children was discussed with a practitioner in England, as well as evidence of local policy.

The evidence submitted suggests that many of the measures being adopted locally are in line with the recommendations of the original report. The key findings are discussed below.

1. Safe storage

The provision of safe storage boxes to service users in receipt of take-home medication can be an effective tool to reduce the risk of accidental ingestions in children and, encouragingly, seems to be a widespread practice.¹² Information submitted highlighted local policies relating to the safe storage of medications in the home. All areas reported either providing a lockable box¹³ to clients or assisting in purchasing one if the client did not have access to a safe storage place for their medication.

The provision of lockable boxes was said to be reinforced by a conversation about the importance of safe storage, either at initial assessment stage or once the service user was moved from a supervised consumption regime and allowed take-home medications. One service provided clients with digital safe storage boxes (accessible with a code, rather than a key) and awarded service users a Bronze, Silver or Gold rating, to reflect the safety of home storage arrangements. The patient leaflets

provided alongside the safe storage box included information on the dangers of OST medications to children and opioid naïve individuals, the importance of safe storage and disposal, legal consequences of not storing medication safely and warnings against diversion. Using the leaflet introduced in Bristol following their ‘Child K’ SCR as a template, one local service also developed a leaflet containing a list of clear ‘do’s and don’ts,’ including an explicit warning not to administer methadone to babies and children.

Safe storage is essential where children and opioid naïve individuals are present within the home, and it is positive to see that many local areas provide these boxes to clients living with children. Other people who may be visiting the family home, or with whom the child has any contact, should also be provided with a safe place to store their medication. Boxes must not only be provided, but the safety message reinforced by a conversation about the importance of safe storage and explicit discussions about the risks to children. All professionals who have access to the home have a shared responsibility for checking on storage arrangements and revisiting discussions around safety and risks to children.

2. Intentional administration

The possibility of parental administration of OST medications to their children, as identified in the original report’s review of SCRs, can be difficult for practitioners to accept. We do not know the true prevalence of this dangerous practice, and

¹² This assumption is based on discussions with practitioners across the course of this research and evidence submitted from local areas.

¹³ The terms ‘safe storage box’ and ‘lockable box’ will be used interchangeably.



it is evident that, in order to address it, different methods to those intended to prevent accidental ingestions should be employed. For example, messages around safe storage are futile if the parent is deliberately administering OST medications to pacify or soothe the child. There is an identified gap in knowledge in relation to the prevalence of parental administration, the motivations behind it and what can be done to address it.

The original report additionally found that discussions about the toxicity of methadone to children and its use as a pacifier were rarely considered at assessment or as part of keyworker interventions. The evidence submitted of local practice revealed little to suggest that this has been consistently addressed, or that intentional administration is now explicitly and routinely discussed with parents in treatment. Whilst leaflets and safety agreements contained variations of warnings such as, *'Methadone is very dangerous when swallowed by children. Children have no tolerance towards the drug and even a tiny amount can kill'*; only two services appeared to have tackled the issue directly and explicitly. Having been prompted to review their safeguarding policies and practice around this issue by Bristol's 'Child K' SCR (where the child was suspected to have been administered methadone over a period of time), one service's patient leaflet stated:

'If you are taking methadone, you must never give any to your child,' and, 'Never give your baby or child even a tiny amount of methadone or other drug to soothe them or help them to sleep.'

It was suggested by practitioners in the original research that drugs workers may be reluctant to accept their clients would engage in such practices, and might be overly-cautious in raising the topic of intentional administration with clients, out of fear of sounding accusatory and damaging the worker-patient relationship. Acknowledging this, one treatment provider compiled a briefing on *Medications in Drug Treatment* for use on their training courses and dissemination to local partners, which stated:

'Staff may find the concept and discussion of intentional administration particularly challenging. However, it is a real risk and should be tackled directly, including making parents aware that this practice is never safe and can be lethal.'

Whilst unequivocal guidance such as this is crucial, practitioners nonetheless need to be equipped with the skills, competencies and confidence required to address challenging issues directly and openly with their clients, and supported to employ them.

3. Dispensing regimes

UK guidelines recommend that OST medications should be administered daily and under supervision for a minimum of three months, with supervision relaxed only once the patient's compliance with the

regime is assured.¹⁴ The relaxation of supervision should be a ‘stepped’ process, in which the patient continues on daily dispensing, but is no longer observed by a professional. As the patient makes progress in their treatment, the frequency of dispensing can be gradually reduced, and larger doses of OST medications allowed to be taken home. Research suggests that service users generally accept the justification for supervised consumption, and agree that all service users should be initially supervised.¹⁵ The introduction of supervised consumption has, in fact, reduced the rate of adult methadone-related deaths in relation to the number of patients in treatment.¹⁶ The risks and benefits of take-home OST prescriptions, as opposed to supervised consumption, have therefore inevitably come under scrutiny when considering how risks to children can be minimised.

In order to provide a more controlled treatment pathway, one service adopted a policy whereby patients must wait a further 12 weeks after the initial three-month supervised period before weekly dispensing is considered. Prior to this, clients were able to receive weekly prescriptions without delay upon reaching the end of the mandatory three-month supervision. Whilst the service reported some initial resistance from clients, it gradually became accepted as the norm. In addition, organisational policy stipulated that if a risk of diversion was identified, the client would be returned to a supervised consumption regime.

Evidence collected from other local areas confirmed that decisions around dispensing regimes take into consideration whether children are present in the home, and reflect the history, needs and risks of the client. However, one service’s action plan identified concerns regarding its assessment of parenting capacity, and the basis upon which prescribing decisions were made. It recommended further research into the benefits of supervised consumption for parents in treatment, together with a deeper consideration of the roles of pharmacists and prescribers. The outcomes of this were not provided.

4 . Prescribing decisions: methadone v buprenorphine

Methadone was the implicated drug in all but one of the 20 SCRs examined in the original report, and accounted for 15 fatalities. By comparison, buprenorphine was implicated in one case, which involved the fatality of a 17-year old.¹⁷ The pharmacology of the two drugs may partially explain this stark contrast: buprenorphine carries less risk of overdose than methadone, due to its ‘ceiling effect’ on respiratory depression, and has been described as a ‘valuable therapeutic safeguard.’¹⁸ In addition, whereas methadone is dispensed as a green oral liquid formulation, buprenorphine is a tablet that must be placed under the tongue for three to five minutes, until dissolved. Given the pharmacological difference and the unlikelihood of

¹⁴ National Institute for Health and Care Excellence (2007) *Methadone and buprenorphine for the management of opioid dependence*

¹⁵ National Treatment Agency for Substance Misuse (2007) *Supervised Methadone in Staffordshire and Shropshire: A study of factors associated with key outcome variables*

¹⁶ *Ibid*; Marteau, McDonald and Patel (2015) ‘The relative risk of fatal poisoning by methadone or buprenorphine within the wider population of England and Wales,’ *BMJ Open* (Web resource)

¹⁷ Whilst the girl who was the subject of the review was said to have expressed suicidal thoughts, the SCR did not conclude whether she had deliberately taken the drug to this end.

¹⁸ Schifano et. al. (2005) ‘Buprenorphine mortality, seizures and prescription data in the UK, 1980-2002,’ *20 Hum Psychopharmacol Clin Exp* 343



a small child placing and retaining a tablet under the tongue for more than three minutes, it has been proposed (both in studies and anecdotally) that buprenorphine presents less risk to children than methadone.¹⁹

NICE states that the decision about which drug to prescribe should be taken on a case-by-case basis, and where no drug appears more suitable than the other, methadone is stipulated as the preferred option, because it is cheaper. However, NICE also notes that there is a high mortality risk associated with methadone in opioid naïve people, and that the clinician should ‘*estimate the benefits of prescribing methadone or buprenorphine, taking account of the person’s lifestyle and family situation (for example, whether they are considered chaotic and might put children and other opioid-naïve individuals at risk).*’²⁰

Very few SCRs have recommended a review of the respective advantages and risks of prescribing buprenorphine over methadone for parents with young children. In line with clinical guidelines, guidance from one local area reiterated that if a risk is identified, buprenorphine should be the preferred option. However, a SCR area that submitted their action plan, developed in response to their own case, has commenced the process of placing all parents with children under five on buprenorphine rather than methadone. This is in the early stages of implementation, and will be a gradual process. A practitioner involved in this initiative stated that the service had experienced little resistance to the

change from service users but, rather, had found it more challenging to encourage GPs to accept the potential benefits of prescribing buprenorphine to some clients. Their reservations, it was reported, were based on a perceived lack of evidence of the benefits of buprenorphine, and they cited the official guidance, which indicates methadone as the preferred option where both appear equally suitable, in objection. Cost is another reason often cited in support of prescribing methadone, which is less costly than buprenorphine.²¹

Adfam was made aware of another local authority (which experienced a SCR) instituting a similar policy. The policy, which has been in place for just over a year,²² stipulates that buprenorphine should be the first option offered to clients entering treatment if they have a child of any age. In the event that the parent requests methadone instead, a drug practitioner must have a discussion of the relative risks of buprenorphine and methadone with the client. The area also reported good joint-working between drug services, social services and health visitors; who are all encouraged to discuss safe storage with clients. An additional agreement with a local hospital was set up, whereby the drug service is notified when any adult or child presents at hospital in the accident and emergency department having ingested OST medications, including the personal details of the patient, name of the drug and the name and details of the person to whom the drug was prescribed. This, it was stated, enables the drug service to review the client’s prescription as appropriate.

¹⁹ The research and a deeper discussion of the relative risks of methadone and buprenorphine are laid out in Section Two.

²⁰ National Institute for Health and Care Excellence (2007) *Methadone and buprenorphine for the management of opioid dependence*

²¹ This is according to anecdotal evidence and discussions with a range of practitioners across the course of this research.

²² At September 2015



The arrangement was said to be common knowledge amongst the treatment population in the area, which, as a result, has come to learn of the severe consequences of OST medication ingestion. A local practitioner said, *‘Parents know the consequences of methadone ingestion are worse than those of buprenorphine. News travels around the treatment community quickly.’* The practitioner went on to say that this might be partly contributing to the lack of resistance from parents to the prioritisation of buprenorphine prescribing over methadone.

The rationale behind the policy was based on a belief that *‘methadone can cause lethargic effects, whereas buprenorphine allows parents to operate more ‘normally.’* Anecdotal local evidence was said to show that people *‘tend to do better in the long term on buprenorphine, which allows for a more planned treatment pathway.’* According to local practitioners, monitoring data of child protection conferences and contact with social care suggested that children whose parents are prescribed buprenorphine tend to stay on child protection plans for shorter lengths of time, and were less likely to enter the social care system.²³ However, a consultant psychiatrist within the service said that people who have suffered emotional trauma tend to do better on methadone,²⁴ and that this is considered in the initial assessment.

Overall, feedback on the policy was very positive and suggested that clients with a commitment

to addressing their drug dependency showed little resistance to buprenorphine as the choice medication. Men were said to be typically more resistant; the majority of whom did not have children living with them, and some were suspected or known to want to continue to use illegal substances in addition to their prescription. It was this cohort, it was reported, that were more resistant to buprenorphine. Indeed, service user evidence indicates that buprenorphine and buprenorphine-naloxone may be associated with reduced rates of continued heroin use ‘on top.’²⁵ Drug services, prescribers and the LSCB were described as supportive of the policy, which has become embedded into local practice.²⁶ An audit of the policy is planned for the near future, and will consider questions such as whether storage arrangements are being routinely checked, and discussions of safe storage regularly revisited. An audit of the agreement with the hospital is also planned.

It is worth noting here the new legislation related to the distribution of naloxone, which came into force on 1 October 2015. The law enables naloxone to be supplied to individuals by drug services without prescription, including those who use or have used opioids and are at potential risk of overdose, and carers, family members or friends liable to be on hand in case of overdose.²⁷ Naloxone is a medication which reverses opioid overdose if given promptly. These new rules mean that the drug will now be much more widely available across the country. The

²³ No written evidence of this was submitted.

²⁴ No supporting evidence was provided.

²⁵ Dale-Perera et. al. (2012) ‘Quality of care provided to patients receiving Opioid Maintenance Treatment in Europe: Results from the EQUATOR analysis’, 14(4) *Heroin Addiction and Related Clinical Problems* 23

²⁶ Note that the area does not have GP prescribing; drug treatment providers carry out all prescribing.

guidance released, however, does not touch upon the use of naloxone to counteract the effects of child ingestions of opioids.²⁸

5. A whole-family approach to assessment

The evidence and materials submitted demonstrated a clear recognition of the importance of a comprehensive, whole-family approach to assessment. Guidance issued by one service strongly emphasised the need for whole-family risk assessments, and encouraged the inclusion of family members in assessment, including an exploration of the child's point of view. Discussions with practitioners and services over the course of this research suggest that it is common practice for services to enquire about children living or in contact with the service user at assessment. One local area reported that a Child and Family Assessment had only been introduced following a local SCR where a young child died after ingesting methadone. Another service developed an audit questionnaire to help professionals conduct effective risk assessments; prompting them to consider whether there are any cohabitants, whether there is a process in place to observe the prescribing regimes of both parents (if both are in treatment), a historical review of the client's treatment journey and processes for challenging information and best practice on working with uncooperative families. The same service also promotes the use of pre-birth assessments, having acknowledged that pregnancy provides a valuable opportunity to engage parents, and particularly mothers, at a time when they are often highly

motivated to address their drug dependency.

Enquiries about other adults prescribed OST medications who may come into contact with children are similarly crucial. Several SCRs analysed as part of the original research identified a deficiency in this respect: drugs workers sometimes tended to focus solely on their client, and overlooked the possible risks presented by partners and extended family members, or visitors to the home.

Home visits were promoted by practitioners consulted as part of the original research, because they provide an opportunity to assess home life and identify risks, check on storage arrangements, see the child, witness parent-child interactions and fully explore the needs of the family. Many services operate home visit procedures, although their exact nature will differ. One service (which had been prompted by Adfam's report to reconsider their own practice) was of the belief that in order to make an effective whole-family assessment, a home visit must be conducted, including the homes of all clients where children regularly visit: for example, the homes of grandparents. A policy implemented by another treatment provider demanded that mandatory home visits for all patients entering treatment with children under five be conducted. Another opted for a joint home visiting protocol with the local children, family and adults service; which insisted that storage arrangements be checked, and facilitated information-sharing and recording processes. CRI, a national treatment provider, also provided

²⁷ *The Human Medicines (Amendment) (No. 3) Regulations 2015*

²⁸ *Public Health England (2015) 'Take-home naloxone from October 2015' (Web resource)*



evidence of their safeguarding children policy, which stipulates that a home visit must be conducted within five working days of the parent entering treatment, if they have a child living with them. The purpose of home visits was said to be manifold: to check on safe storage, ascertain if there are unmet needs in the home and to observe the child with the parent. Home visits were additionally said to help build a bigger picture of the client's environment, to inform the recovery plan and direct the client towards appropriate services (such as children's centres), if necessary. If it is not possible to conduct a home visit within five working days, drugs workers must provide the client with a lockable box; explaining the purpose of the box, discussing the risks to children and arranging a time for a home visit to be conducted. The policy expects staff to be explicit in their discussions with clients, and encourages joint home visits with health visitors or social workers, where appropriate. This policy was recognised not as a 'catch-all', but was said to be effective in highlighting the seriousness of the issue to both drug treatment staff and parents.

6. Professional competency, curiosity and challenge

The *Munro Review of Child Protection*²⁹ highlighted how the problem of prescriptive practice – a 'tick-box culture' – had restricted professionals' ability to exercise professional judgement. It therefore encouraged workforce development, the development of professional learning, and advocated for the use of the Social Work Reform

Board's Professional Capabilities Framework to, amongst other things, inform social work training and continuing professional development. Several respondent local areas indicated they believed there was a need for training to improve professional competency and build on the skills of the workforce. One service, in a local authority which had experienced a SCR involving a non-fatal child ingestion of methadone, successfully incorporated OST-specific issues into the multi-agency Hidden Harm training it is contracted to deliver locally. Another provider, in accordance with the local action plan developed in the wake of a SCR, has since then delivered multi-agency training covering safeguarding children from OST to over 400 health visitors, in addition to a range of other professionals in the drug, children's social care and health sectors. One local service, prompted to review their policies and practice by Adfam's report, likewise recognised the need for clarity amongst all professionals involved, and support for them to develop their skills and feel confident in implementing professional challenge and curiosity. The service is currently assessing how it could incorporate OST-specific content into the compulsory training already provided by the LSCB, in addition to how best to train and educate the workforce on recognising the signs of disguised compliance.³⁰ Guidance issued to services in another local area urged against professional over-optimism, and another encouraged 'healthy scepticism' and 'respectful uncertainty' in their staff. It is possible to infer from the evidence submitted that services recognise

²⁹ Munro (2011) *The Munro Review of Child Protection: Final Report*

³⁰ 'Disguised compliance' involves a parent or carer giving the appearance of co-operating with services to avoid raising suspicions, to allay professional concerns and ultimately to diffuse professional intervention. The term is attributed to Reder, Duncan and Gray, who outlined this type of behaviour in their book 'Beyond blame: child abuse tragedies revisited.' (Reder et al. (1993) *Beyond blame: Child abuse tragedies revisited*. London: Routledge)



the importance of such skills in minimising risks to children, and isolated efforts are being made to build workforce competency. However, more needs to be done to ensure that training to instil such skills within the workforce, including drug treatment, health and social care providers, is delivered across the country.

7. Joint-working and information-sharing

Multi-agency collaboration was another process that was considered key to an effective and robust local safeguarding policy, and many local areas highlighted their links with partner agencies. Several services described their processes of joint-working between children’s social services and drug treatment providers. One local treatment provider said they contacted social services if there had been prior involvement between the child and social care, and liaised with them regardless of previous contact where there were concerns. Another service reported having implemented joint early help assessments with social services for service users and families, and a further two local areas were said to convene multi-agency meetings with drug treatment workers and managers, health visitors and social workers in attendance. It must be remembered, however, that joint-working – necessary to an effective holistic approach to care – means more than just communication between the drug provider and social services; it requires the collaboration of a much wider range of practitioners, including health visitors, prescribers, GPs, community pharmacists, midwives, school nurses, the police, LSCB and any other services working with the family.

Following a fatal child ingestion of methadone, one drug treatment service implemented a recommendation that was made in the SCR overview report into the child’s death, and developed a *‘pathway to ensure multi-agency assessment is always undertaken.’* To this end, training sessions were delivered to health visiting teams across the county, complimented by the introduction of practice guidance and an assessment tool for health visitors working with parental substance use (focusing on parents in the methadone programme). The treatment service also transferred their data information system to that used by GPs and health professionals locally, in order to facilitate information-sharing. The practice guidance issued to health visitors recommended minimum monthly contact if a child is on a safeguarding plan, and home visits every three months for children under two, not on a safeguarding plan. It also encouraged the development and use of professional judgement, as well as adherence to the assessment tool containing an extensive list of prompts. Risk assessments carried out by the drug service are sent to health visiting teams via the secure email system and reviewed every three months, and clients are informed on entering treatment with whom and under what circumstances personal information will be shared.

An audit of referrals from the drug service to health visitors was conducted, which analysed a random selection of electronic records. A total of 46 referrals were made in the six-month period reviewed, with 24 cases included in the audit. Results showed that 23 of the 24 records were clearly documented,

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21 showed evidence that the guidance for home visiting had been followed, 22 recorded safe storage arrangements having been checked and 20 records provided evidence of additional sharing of information with the drug service, GP, multi-agency team and other agencies. Of the records reviewed, there was evidence of only one joint home visit carried out between the health visitor and drugs worker. A joint home visit, according to local guidance, should be conducted if (i) there is a history of disengagement with health visiting, midwifery or drug treatment services, (ii) there is involvement with social care or an identified risk, (iii) there is significant use of alcohol alongside drug use or prescribed medication, (iv) active drug dealing is identified or suspected, or (v) there is a history of domestic abuse. In all other cases, guidance states that professionals are expected to use their professional judgement, ‘*based on case history and current involvement.*’ The process is still very new and will need time to embed, but these results are nonetheless a promising example of effective joint-working between drug treatment and health visiting teams to better safeguard children.

Further examples of embedding joint-working into local practice included materials produced to emphasise the role of all professionals in safeguarding children against the risks of OST – especially those visiting the home – and guidance for professionals around providing and reinforcing safety advice, regularly reviewing safety plans, sharing information and monitoring children for signs of intoxication. One local action plan

submitted by a treatment provider also proposed the introduction of a joint protocol for information-sharing and reporting. It is not known, however, whether this has been successfully introduced, since no progress information on implementing the plan was provided.

8. Other measures

Through continued discussions with practitioners and agencies over the course of this project, it seems that many local areas have taken comparable actions to address this particular risk to children. Examples of practice, whilst not commonplace, included:

- **Specialist workers:** A drug treatment service in England reported having appointed two specialist family workers: one to work with pregnant service users and another with families. The value of such roles was recognised in the 2015 (‘Child BT’) Blackpool SCR (discussed below), where the panel, as well as detailing missed opportunities, also considered examples of effective practice for wider learning. The drug service from which the mother in the case was receiving treatment operated a clinic for pregnant women who were using opioids, and employed a specialist midwife. This model was highly commended by the review panel, which emphasised the need for strong links amongst agencies in order for safeguarding concerns to be shared and acted upon quickly and effectively. Specialist workers, dedicated to family work, were also considered to help a service maintain a whole-family focus.



- **Specialist programmes:** One LSCB devised, with partners, a multi-agency strategy and action plan, which was promoted by the local Health and Wellbeing Board as well as the LSCB, and has prompted a review of the range of services available locally to parents receiving drug treatment services. Having identified a gap in local provision, a parenting programme was developed, which now forms part of the core offer to parents in treatment with children under five. The programme runs over 10 weeks and aims to support and educate parents, whilst promoting self-esteem and motivation for a healthy lifestyle and positive parenting. An evaluation of the pilot of the programme showed a number of positive outcomes for the participants, including increased mental wellbeing,³¹ greater engagement with available services and better family relationships. Following a successful pilot, further funding has been awarded to continue to provide the programme.
- **Hair strand testing for children:** The same local authority also implemented a policy of hair strand testing all children under five where social care are actively involved, and where child ingestion is suspected. More information was requested, but none was provided. Whilst one study³² suggested that hair strand testing was a useful way of detecting drug use in children’s environments, it is worth noting that this is

a costly policy, which may give rise to issues around consent. The reliability of such tests has also been called into question in court.³³ It is therefore an area worthy of clarification, and requiring local agreement.

Another area from which evidence was gathered reported that it was seeking to secure funding for an initiative to hair strand test all looked after children.³⁴

Conclusion

Safeguarding children from the risk of OST ingestion requires a coordinated effort, and it should be recognised that any of the above measures in isolation are unlikely to eradicate risk. The evidence gathered shows that some local authorities have recognised the need to strengthen and improve their ways of working in order to better safeguard children, and have taken proactive steps to address this issue. Whilst the evidence provides a mere snapshot of current practice, it does indicate that many local services are taking similar steps, for example: providing safe storage boxes and advice, working to improve professional knowledge and competencies, and developing joint-working protocols.

All respondent areas stated that they routinely provide parents in treatment with a safe place to store their medication (apart from one which assists in purchasing a lockable box if the client

³¹ This was measured using the Warwick Edinburgh Mental Wellbeing Scale, which learners completed at the beginning and end of the course.

³² Pragst et.al. (2013) 'Methadone and illegal drugs in hair from children with parents in maintenance treatment or suspected drug abuse in a German community,' 35(6) *Ther Drug Monit.* 737. Discussed in Section Two

³³ *Bristol City Council v A and A, and SB and CB, and Concateno and Trimega* [2012] EWHC 2548 (Fam)

³⁴ This had not been approved by September 2015.



did not have a secure storage place). Whilst this is a simple and thus attractive solution, it should be stressed that it is not a solution in itself. The risk of complacency once a safe storage box is issued was identified in the original report: practitioners sometimes assume their responsibility for managing risk is satisfied by the mere provision of a lockable box. Discussions of safe storage boxes are also defunct when faced with the problem of intentional parental administration. Nonetheless, clients in treatment who have contact with children must be provided with a secure place to store their medication if they are prescribed take-home doses, and this should be reinforced by a conversation with a professional about the importance of safe storage and the risks to children associated with OST ingestion.

In order to reduce the risk of parental administration, leaflets and safety agreements must carry explicit and direct warnings of the risks of OST drugs to children, which should be accompanied by an open conversation with the client. Practitioners interviewed for the original report proposed a number of reasons why the issue of intentional administration may not be routinely discussed with patients. It was suggested that staff were less familiar with the practice of intentional administration than with the risks associated with OST more generally, and that practitioners may not think to initiate a conversation about the risks, based on a presumption that the parent would already be aware of the risks of OST to

children. Some practitioners felt that such candid conversations would be challenging to undertake without sounding accusatory, and to do so would therefore risk the service user's engagement and damage the worker-client relationship.

The answer to this is effective training to equip practitioners with the skills to conduct challenging conversations and broach difficult topics directly and openly with their clients. As was suggested by one practitioner: using a SCR example to demonstrate the dangers of OST to children, rather than presenting it as an identified risk for the individual, could be a useful and non-threatening way for practitioners to raise the issue with their clients. Other methods could include enquiring about the child's sleeping patterns and how this affects the parents; indirectly assessing whether the parents are struggling to cope with an unsettled child, and the risk of OST drugs being used as a means of pacification. Practitioners must acknowledge that poor parenting practices can sometimes take place in their client group, be fully aware of the risks of OST to children, and should be supported to be able to approach the subject in a non-punitive manner, keeping both the parent's and child's interests in mind. The importance of health visitors is relevant here: being concerned primarily with the health and wellbeing of young children, and trained to recognise vulnerable families, having knowledge and understanding of the risks of OST to children should be integral to the health visitor's assessment.

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We do not know how commonplace the practice of intentional administration of OST drugs to children is amongst the treatment population. Whilst anecdotal evidence and the review of SCRs between 2003 and 2013 would suggest that it certainly occurs, research to estimate the scale of the problem is lacking. The 20 SCRs examined in the original report included five confirmed cases of intentional administration by the parents, and in a further six cases, it was unclear how the child came to ingest the drug. Further research into how and why parents may administer drugs to their children is advised, to ascertain its prevalence amongst the treatment population, to raise awareness of the practice amongst professionals and to effectively tackle it in practice.

The need for a ‘whole-family approach’ was recognised by several respondent services. A robust assessment of risk to the child demands that the whole family and environment is considered. Specialist family workers in drug treatment services could help ensure and maintain a family focus, and multi-agency training should seek to embed a family mentality within the workforce, as well as instilling wider knowledge and skills. As previously highlighted; male service users, in particular, must be frequently asked about contact with children, since they are more likely to be transient and their relationship status can quickly change. Female service users should be frequently asked about new partners and people visiting the family home. Home visits were considered an invaluable tool in forming

an accurate picture of the entire family around the child, and in making effective risk assessments to inform the client’s recovery plan, according to the evidence submitted.

The audit of health visitor referrals provided by one area is a promising model, and gives support to the development of inter-agency joint protocols. In order for practitioners to have a ‘whole picture’ of the family, inter-agency cooperation and communication is crucial. In line with *Working Together*³⁵ and NTA guidance,³⁶ local authorities should consider the creation of inter-agency joint protocols to facilitate information-sharing, and better manage risk. The Child Protection-Information-Sharing (CP-IS) project, an NHS England initiative, could also be a useful tool to facilitate information-sharing, and conducive to early intervention. The project, if buy-in from local authorities is achieved, will link the IT systems of NHS unscheduled care to those used by social care child protection teams, so that information can be shared about three specific categories of child: those with a child protection plan, those classed as looked after and any pregnant woman whose unborn child has a pre-birth protection plan. Children entering A&E, outpatient departments, other unscheduled care settings and unborn children subject to a pre-birth protection plan will be flagged up as vulnerable. However, this measure is limited, given that it only applies in NHS settings, and would be of more benefit if it were to be extended or replicated to all providers of children’s services (for example, health visitors).

³⁵ Department for Children, Schools and Families (2010) *Working together to Safeguard Children: A guide to inter-agency working to safeguard and promote the welfare of children*

³⁶ National Treatment Agency for Substance Misuse (2010) *Supporting Information for the Development of Joint Protocols between Drug and Alcohol Partnerships, Children and Family Services*



Of particular importance when considering professional competencies are the concepts of professional challenge and curiosity, bearing in mind the professional tendency towards over-optimism identified in SCRs and research for the original report. Findings from several SCRs suggested that professionals working with the families had been overly optimistic; accepting their clients' explanations without challenge and, as a result, missing signs that would have indicated that the child in question was at risk. Professional curiosity and challenge is crucial for workers in tackling disguised compliance and intentional administration – both in recognising the signs of ingestion in children, and being open to the possibility that their clients might engage in the practice. Training to instil these skills within the workforce is critical, together with ongoing support (such as regular supervision) for frontline practitioners to be able to confidently put these skills into practice.

A lack of uniformity in both dispensing regimes and prescribing decisions was evident when reviewing the information submitted by respondent services. When supervised consumption is reduced or stopped, it is essential that a robust risk assessment is carried out to assess the suitability of take-home medication, with particular consideration of risks to children. Rather than automatically allowing weekly prescriptions when the three-month supervision period comes to an end, services and

prescribers should exercise professional judgement, in collaboration with others, and base decisions firmly on robust risk assessments, with particular consideration of risks to children. Whilst it may at first seem like a simple 'catch all' solution to place parents and those in contact with children on a supervised consumption regime indefinitely, it must be remembered that treatment services offer a protective factor for the child, and excessively rigid dispensing policies may risk the parent's engagement with treatment. Clients with children will necessarily find it more difficult to attend a pharmacy daily, due to childcare responsibilities, and there is evidence to suggest that client satisfaction is higher the less frequently they are required to collect their medication.³⁷ Rather than a blanket rule such as this, a more proportional response would be to base decisions on the frequency of dispensing on robust and informed risk assessments, following input from all professionals involved with the family.

Some local areas have also initiated a move towards the preferred prescribing of buprenorphine for parents in treatment, based on the belief that it poses less risk to children. Early anecdotal evidence suggests that these policies have elicited only initial resistance from some clients, whilst many have accepted the rationale without challenge. *Section Two* contains a deeper discussion of these prescribing decisions.

³⁷ Amass et.al. (1998) 'Alternate-day buprenorphine dosing is preferred to daily dosing by opiate-dependent humans. *Psychopharmacology*, 136(5) PubMed 217



This section has provided examples of actions taken by local authorities and individual services to minimise the risks to children posed by OST medications in the home. It would be an exaggeration to suggest that the amount of evidence gathered allows for the formation of an accurate picture of local policy and practice across the country, and further information on the progress of the actions detailed above was not provided in many cases. The ad hoc nature of the actions taken in different local areas emphasises the need for a nationally-driven, coordinated response to prevent more child deaths. Nonetheless, it is encouraging to see that isolated actions are being taken to better safeguard children from the risks posed by these drugs, and it is hoped that the examples of local practice provided above will encourage further progress towards this aim.

Section two: Estimating the scale of the problem

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Medications in Drug Treatment set out to gather all SCRs where OST medications were implicated in harm to a child between 2003 and 2013. It found that 20 SCRs, involving 23 children, had been conducted during this period (17 in the latter five years). These included 17 fatalities and six non-fatal ingestions – not forgetting the additional number of ‘near misses’ and incidents that did not result in a SCR. Methadone was mentioned in 19 of the 20 SCRs, and was responsible for 15 fatalities. Buprenorphine was responsible for one. The literature review similarly yielded little information from which an accurate estimate of the number of children at risk, or the number of child ingestions, could be reached. However, since the publication of the report last year, some of the figures contained therein have been updated, and new evidence obtained. This section provides available updates to the statistics contained in the report, as well as presenting new information.

1. The number of children affected by parental drug use

The 2003 estimate that there are 250,000-350,000 children of problem drug users in the UK³⁸ has long been considered an underestimation, largely based on the fact that it is an extrapolation of treatment data alone. A 2009 study³⁹ sought to obtain a more accurate picture of the number of children living in the UK affected by parental substance use, and found that around one million children lived with an adult who had used an illicit drug in the past year, and just under half a million with someone who had done so in the past month. It also revealed that the number of

children living in a household where the only adult was a drug user had more than doubled between 2000 and 2004/5, and that 334,000 children were estimated to be living with a dependent drug user. However, this data is similarly limited, given that it is based upon self-reported evidence by the parents. The real number of children affected by parental drug use can thus be assumed to be higher than these figures suggest.

2. The number of people with parental responsibility receiving a prescribing intervention

Following a Freedom of Information request, a breakdown of the number of adults in each English local authority receiving a prescribing intervention for opioid dependency and with parental responsibility in 2012-2013 was obtained; totalling 61,928 across England – an increase on the 60,596 recorded in 2011-12.⁴⁰ The number of OST patients with parental responsibility varied significantly between local authorities: ranging from Birmingham with 2,100, to Bracknell Forest with 21. When comparing the number of SCRs with the high numbers of people receiving a prescribing intervention who have parental responsibility, it is clear that OST presents a risk factor in proportionally very few families. A breakdown of the number of parents on supervised consumption regimes versus take-home doses is not provided; therefore, the number of children living in households where OST drugs are stored in the home is still unknown. This is important since we know that the majority of exposures to OST medications occur within the child’s own home.

³⁸ Advisory Council on the Misuse of Drugs (2003) *Hidden Harm*

³⁹ Manning et. al. (2009) ‘New estimates on the number of children living with substance misusing parents: results from UK national household surveys,’ *9 BMC Public Health* 377

⁴⁰ *HC Deb* 29 October 2013, vol 569, cols 439-440

3. The number of children admitted to hospital due to methadone ingestion

It was recommended in the original report that data should be centrally collected on the number of under-18s admitted to hospital following the ingestion of OST medications. It has since been discovered that the Health and Social Care Information Centre (HSCIC) collects figures on hospital diagnoses of methadone poisoning in England, but not of buprenorphine poisoning.⁴¹ Between 2003 and 2013, these figures show that at least 310 children (0-17) were admitted to hospital and diagnosed with methadone poisoning. Until the 2012-13 report, the age breakdown did not allow for distinction between children aged 15 and above and adults (the age category being 15-59 years). Consequently, the number of children aged 15 and above who were hospitalised after ingesting methadone is not included in this statistic.

The two most recent reports provide a much more detailed breakdown of age. In 2012-13, 15 under-fives were admitted to hospital as a result of ingesting methadone: on average, one every 24 days. A total of 25 children were admitted to hospital with methadone poisoning during that year. The most recent set of figures available (2013-14) show that 18 children presented at hospital with methadone poisoning; seven of whom were under five.⁴² These figures, whilst distressing and startling, provide a much needed realistic estimation of the scale of the problem. They also illustrate the

ineffectiveness of SCRs as a means of measuring the incidence of OST ingestion in children. However, these figures capture only hospital admissions in England, do not provide an estimation of the number of children admitted to hospital with buprenorphine poisoning and, for the majority of the time period, children aged 15 and above were not accounted for. As a result, the total number of children throughout the UK that have been hospitalised due to all OST medications since 2003 presumably exceeds the 328 identified.

4. New drug-related death statistics

The latest data to be released by the Office for National Statistics on deaths related to drug poisoning in England and Wales was published in early September 2015.⁴³ After several years of decreasing levels of drug-related deaths, the last two years have seen an increase to record highs, with a total of 3,346 drug poisoning deaths registered in 2014. The number of deaths involving methadone, however, was down 8% on the previous year: from 429 in 2013, to 394 in 2014; representing 11.8% of the total number of drug-related deaths. Three of the 394 methadone-related deaths involved persons aged under 20, yet it is unknown whether these three deaths involved under-18s.⁴⁴

The number of deaths involving buprenorphine is not provided in the main publication, although it is reasonable to assume these deaths form a portion of those in the 'other specified opiate' category.

⁴¹ Health and Social Care Information Centre, *Hospital Episode Statistics, Admitted Patient Care – England, 2003-13*. (Appendix 1). Coding was changed for the 2012-13 report, and provided a narrower breakdown of patient ages.

⁴² HSCIC (2014) *Hospital Episode Statistics, Admitted Patient Care – England, 2013-14*

⁴³ Office for National Statistics (2015) *Deaths related to drug poisoning in England and Wales, 2014 registrations* (Web resource)

⁴⁴ No further age breakdown was provided

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However, a complete set of the data is available to download separately;⁴⁵ which shows that in 2014, 24 deaths were registered where buprenorphine was mentioned on the death certificate – an increase on the 13 registered in 2013.⁴⁶ The table categorising the number of drug-related deaths by age and selected substances mentioned on the death certificate does not provide a breakdown of those deaths relating specifically to buprenorphine. Rather, these deaths are included in the ‘other specified opiate’ category; of which, three deaths occurred in under-20s. (This was confirmed by an ONS researcher, with whom contact was made in order to request data on the number of under-18s that had died in 2014 where methadone or buprenorphine was involved. This data, however, is not made readily available, and was not provided).⁴⁷ It cannot be ascertained whether these three deaths did in fact involve buprenorphine or another opioid, nor whether they involved children.⁴⁸

5. The number of child deaths related to ingestion of OST medications

In researching the original report, it became apparent that child mortality statistics where OST was implicated were not publicly available, and did not appear to be centrally held. However, data on the number of child deaths in each of the countries of the United Kingdom has since been obtained: from the Office for National Statistics (ONS), Northern Ireland Statistics and Research Agency (NISRA)

and National Records of Scotland (NRS). These are set out below. It must be borne in mind that these data are not in the public domain and cannot be independently verified.⁴⁹

i. England and Wales

The mortality statistics released by the ONS include all registered deaths in England and Wales related to drug poisoning, categorised by age, sex, causality and by means of intent or accident.⁵⁰ Whilst the total number of deaths related to methadone poisoning across all age categories is recorded, no detailed age breakdown is provided, and it cannot be discerned how many of these deaths involved children. Given this lack of publicly available information, contact was made with the ONS to request data for all deaths involving persons up to and inclusive of the age of 18, registered between 2003 and 2013, in England and Wales that were related to methadone and buprenorphine. The statistics provided are shown in Tables 1 and 2 *overleaf*.

⁴⁵ ONS (2015) *Deaths related to drug poisoning, 2014 - Reference Tables (Excel sheet 469Kb)* (Web resource)

⁴⁶ *Ibid*, Table 6a

⁴⁷ Such data is released payable to a fee.

⁴⁸ *Ibid*, Table 7

⁴⁹ The data was released upon payment, and is not accessible otherwise i.e. it is not in the public domain.

⁵⁰ ONS (2013) *Deaths Related to Drug Poisoning in England and Wales 2009 – 2013* (Web resource)

Table 1: Total number of deaths by methadone poisoning for those up to the age of 19 inclusive in England and Wales, registered between 2003 and 2013

| Registration year | Total number of reported methadone-related deaths in the 0-14 age group (13 deaths) | Identified SCRs in the original report | Total number of methadone-related deaths in the 15-19 age group (59 deaths – 15-18 year olds)* |
|-------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| 2003 | 1 (Camden (Child 'B')) | 1 (Camden (Child 'B')) | 5 |
| 2004 | 0 | 0 | 10 |
| 2005 | 1 (North Yorkshire (Child 'SNM')) | 1 (North Yorkshire (Child 'SNM')) | 9 |
| 2006 | 1 (Plymouth (Child 'LB')) | 1 (Plymouth (Child 'LB')) | 9 |
| 2007 | 1 (Plymouth (Child 'LB')) | 0 | 11 |
| 2008 | 0 | 2 (Nottingham City (Child 'Thomas'), Staffordshire ('Child aged 3')) | 17 |
| 2009 | 2 (Nottingham City (Child 'Thomas'), Staffordshire ('Child aged 3')) | 0 | 12 |
| 2010 | 0 | 0 | 8 |
| 2011 | 0 | 1 (Bristol (Child 'K')) | 13 |
| 2012 | 1 (Bristol (Child 'K')) | 0 | 6 |
| 2013 | 0 | 0 | 1 |

*A further age breakdown for the entire period was later provided. See below.

The table above shows that between 2003 and 2013, 72 deaths from methadone poisoning were registered in England and Wales, for persons up to the age of 18 inclusive. The ONS initially provided a breakdown of deaths in 0-14 and 15-19 age categories. A request was subsequently made to further breakdown the 15-19 age category, to include only those aged 15-18. Rather than providing an annual breakdown of deaths in the 15-18 year old category, the ONS provided the combined figure for the number of 15-18 year olds that had died over the 10-year period; showing that between 2003 and 2013, 13 under-15s and 59 persons aged 15-18 died from methadone poisoning. The ONS does not hold information about individual cases and was unable to provide details of the circumstances of death, including sex, locality, whether the methadone was prescribed to a parent or carer or whether the cases

involved accidental or intentional administration.⁵¹

Evidently, there is a striking discord between these statistics and the number of SCRs analysed as part of the original report. The 15 methadone-related fatalities identified in the report show only a fraction of the child deaths related to methadone poisoning occurring over this time period. Of the 13 fatalities in the 0-14 age group, seven did not result in a SCR. It was not possible to cross-reference deaths in the 15-18 age group, given that an annual breakdown was not provided. In addition, an age-bias towards younger children was identified in the SCRs in the original report – the median age of the child being just two years old. However, the above dataset suggests that these findings were not representative of the typical age of children dying from methadone poisoning.

⁵¹ It should be noted that these figures relate to deaths in England and Wales where methadone was mentioned on the death certificate.

Table 2: Total number of deaths by buprenorphine poisoning for those up to the age of 19 inclusive within England and Wales, registered between 2003 and 2013

| ONS registration year | Total number of deaths in the 0-14 age group | Total number of deaths in the 15-19 age group |
|-----------------------|----------------------------------------------|-----------------------------------------------|
| 2003 | 0 | 0 |
| 2004 | 0 | 1 |
| 2005 | 0 | 3 |
| 2006 | 0 | 1 |
| 2007 | 0 | 3 |
| 2008 | 0 | 2 |
| 2009 | 0 | 1 |
| 2010 | 0 | 3 (1 was Cumbria 'Child E') |
| 2011 | 0 | 2 |
| 2012 | 0 | 3 |
| 2013 | 0 | 0 |

Table 2 shows that between 2003 and 2013, 19 people aged 19 or under died from buprenorphine poisoning. Unlike the dataset above, the ONS failed to provide a further breakdown of the 15-19 year old age category for buprenorphine-related deaths. As a result, it cannot be determined how many of the deaths listed above involved persons aged 15-18. However, according to this data, no children aged 0-14 died from buprenorphine poisoning during this period, thus illustrating a strong bias towards adolescents in buprenorphine-related deaths.

The one SCR involving buprenorphine, which was analysed as part of the original research, related to the death of a 17-year old – ‘Child E’, Cumbria (2010). Why this case warranted the undertaking of a SCR whilst others did not is unknown. Statutory guidance states: *‘when a child dies (including death by suicide) and abuse or neglect is known or expected to be a factor in the death, the LSCB should always conduct a SCR into the involvement*

*of organisations and professionals involved in the lives of the child and the family.’*⁵² ‘Child E’ was well known to local agencies: her child was subject to a child protection plan, she herself had previously been in the care of two local authorities, served a period of detention in a secure children’s home and had her name placed on the child protection register three times. She had also been admitted to a psychiatric ward shortly before her death, and was treated for depression.

It may be that the panel did not consider the threshold for a SCR to be met in the other cases recorded in the table above, because they were not suspected to have involved neglect or abuse, or because there simply was no professional involvement with the child or family. If no professionals were involved with the family, a SCR would unlikely be conducted. There is also scope for differing interpretations of ‘abuse’ and ‘neglect’

⁵² Department for Children, Schools and Families (2010) *Working together to Safeguard Children: A guide to inter-agency working to safeguard and promote the welfare of children*

amongst local authorities, and this may be one of the reasons why some child ingestions of OST medications resulted in SCRs whilst others did not. In areas that receive large amounts of child in need referrals, it may be speculated that thresholds are likely to be higher.

ii. Northern Ireland

The NISRA annually publishes statistical data on drug-related deaths. In the 2003-2013 report,⁵³ a total of 24 drug-related deaths across all age categories where methadone was mentioned on the death certificate were recorded. NISRA was contacted and a request was made to provide the number of deaths involving those aged 0-18 during this period where methadone and buprenorphine were mentioned. It advised that none of the 24 methadone-related deaths that occurred during this 10-year period were registered in the 0-18 age group. In addition, it claimed that no buprenorphine-related deaths were registered in the 0-18 age group between 2003 and 2013. No statistical data was provided by NISRA to verify this, and it was unable to comment as to why deaths may not have been registered.

iii. Scotland

In Scotland, the NRS produces and archives all statistics monitored on an annual basis, and holds information on all registered deaths. The NRS was contacted, and Adfam was provided with a set of data containing all drug-related poisoning deaths from 2003 to 2013 for those up to and including

the age of 18, with corresponding classification codes. Deaths are classified under the International Statistical Classification of Diseases and Related Health Problems (ICD-10), which is a comprehensive classification of causes of morbidity and mortality, maintained by the World Health Organisation (WHO). The information in the table below (Table 3) has been summarised and condensed to include only relevant information for the purposes of this report. The 'Drug(s) Involved' column lists those drugs, which according to the coroner's report, were found in the body at the time of death.

Table 3 (overleaf) shows that between 2003 and 2013, 37 deaths were registered in Scotland, involving persons up to and including the age of 18: 35 related to methadone, and two to buprenorphine. The two buprenorphine-related deaths included that of a 14 year old who, according to the information provided, died from buprenorphine and diazepam intoxication, with undetermined intent (i.e. we do not know whether the child used it as a drug of abuse or intended to overdose). However, the NRS website states that, for the purpose of statistics, deaths classified as such can be counted as probable suicides.⁵⁴ The second was that of a 16 year old, which was deemed to have been a case of accidental poisoning. The two deaths of children under five involved a new born and two year old; the cause of death in the former was noted as, 'Combined effects of mechanical Asphyxia⁵⁵ and Methadone (from breastfeeding)' and in the latter, 'Methadone toxicity.' This latter case was deemed

⁵³ Northern Ireland Statistics and Research Agency (NISRA), Tables for Drug Related Deaths due to Drug Misuse Registered in Northern Ireland, 2003- 2013 (Table 4)

⁵⁴ National Records of Scotland (date unpublished) 'How NRS Classifies Deaths for Statistical Purposes as (Probable) Suicides' (Web resource)

⁵⁵ Mechanical asphyxia is a form of asphyxia caused by a mechanism that prevents lung ventilation i.e. smothering.

Table 3: Total number of methadone and buprenorphine related deaths between 2003 and 2013 for those up to the age of 18 inclusive, extracted from a dataset provided by the NRS

| Year | Age | Drug(s) involved | ICD-10 Code |
|------|-----|------------------------------------------|----------------------------------------------------------------------------------------------------------|
| 2003 | 17 | Methadone, Morphine, Cannabis | F11 (Mental and behavioural disorders due to use of opioids) |
| 2003 | 18 | Methadone, Morphine | X42 (Accidental poisoning) |
| 2003 | 18 | Methadone, Diazepam, Alcohol | F11 (Mental and behavioural disorders due to use of opioids) |
| 2004 | 16 | Methadone, Diazepam, Fluoxetine | F11 (Mental and behavioural disorders due to use of opioids) |
| 2004 | 18 | Methadone, Diazepam | F11 (Mental and behavioural disorders due to use of opioids) |
| 2005 | 0 | Methadone | PO4 (Fetus and new born affected by maternal factors) |
| 2005 | 2 | Methadone | X42 (Accidental poisoning) |
| 2005 | 16 | Methadone, Diazepam, Alcohol | F11 (Mental and behavioural disorders due to use of opioids) |
| 2005 | 18 | Methadone, Heroin, Diazepam | F11 (Mental and behavioural disorders due to use of opioids) |
| 2005 | 17 | Methadone, Alcohol | Y12 (Poisoning by undetermined intent) |
| 2005 | 18 | Methadone, Benzodiazepine, Amitriptyline | F11 (Mental and behavioural disorders due to use of opioids) |
| 2006 | 16 | Methadone | X42 (Accidental poisoning) |
| 2006 | 17 | Methadone | Y12 (Poisoning by undetermined intent) |
| 2007 | 18 | Methadone | Y12 (Poisoning by undetermined intent) |
| 2007 | 18 | Methadone, Citalopram | F11 (Mental and behavioural disorders due to use of opioids) |
| 2007 | 18 | Methadone, Heroin, Amphetamine, Ecstasy | F19 (Mental and behavioural disorders due to multiple drug use and use of other psychoactive substances) |
| 2007 | 18 | Methadone, Dihydrocodeine | Y12 (Poisoning by undetermined intent) |
| 2008 | 18 | Methadone | F11 (Mental and behavioural disorders due to use of opioids) |
| 2008 | 17 | Methadone, Heroin | F11 (Mental and behavioural disorders due to use of opioids) |
| 2008 | 18 | Methadone, Diazepam | X42 (Accidental poisoning) |
| 2008 | 18 | Methadone, Diazepam, Benzodiazepine | F19 (Mental and behavioural disorders due to multiple drug use and use of other psychoactive substances) |
| 2008 | 18 | Methadone, Diazepam | Y12 (Poisoning by undetermined intent) |
| 2009 | 14 | Buprenorphine and Diazepam Intoxication | Y12 (Poisoning by undetermined intent) |
| 2009 | 16 | Methadone | F11 (Mental and behavioural disorders due to use of opioids) |
| 2009 | 16 | Methadone | F11 (Mental and behavioural disorders due to use of opioids) |
| 2009 | 17 | Methadone, Diazepam | F19 (Mental and behavioural disorders due to multiple drug use and use of other psychoactive substances) |
| 2010 | 17 | Methadone | F11 (Mental and behavioural disorders due to use of opioids) |
| 2010 | 18 | Methadone | F11 (Mental and behavioural disorders due to use of opioids) |
| 2010 | 17 | Methadone, Alcohol | F11 (Mental and behavioural disorders due to use of opioids) |
| 2010 | 17 | Methadone, Diazepam | Y12 (Poisoning by undetermined intent) |
| 2011 | 18 | Methadone | Y12 (Poisoning by undetermined intent) |
| 2011 | 17 | Methadone | X42 (Accidental poisoning) |
| 2012 | 17 | Methadone | X42 (Accidental poisoning) |
| 2012 | 16 | Methadone | Y12 (Poisoning by undetermined intent) |
| 2012 | 17 | Methadone, Mirtazapine | Y12 (Poisoning by undetermined intent) |
| 2012 | 18 | Methadone, Diazepam | X42 (Accidental poisoning) |
| 2013 | 16 | Buprenorphine, Cocaine | X42 (Accidental poisoning) |

to have been one of accidental poisoning, indicated by the corresponding classification code. No further information, such as the method of ingestion or to whom the methadone was prescribed, was provided.

The majority of deaths (33 of 37) involved methadone ingestion by adolescents aged 16 to 18. Fifteen deaths were attributed to ‘*mental and behavioural disorders due to use of opioids*,’ nine to ‘*poisoning by undetermined intent*,’ six to ‘*accidental poisoning*’ and three to ‘*mental and behavioural disorders due to multiple drug use and use of other psychoactive substances*.’ As per above, those deaths classified as ‘*poisoning with undetermined intent*’ may be classified as ‘*probable suicides*.’ The ‘*mental and behavioural disorders due to use of opioids*,’ classification attributed to fifteen deaths signifies simply that the person suffered acute intoxication due to the use of opioids.⁵⁶ However, the three deaths classified as ‘*mental and behavioural disorders due to multiple drug use and use of other psychoactive substances*,’ indicates that there was evidence of intoxication caused by recent use of other psychoactive substances, or of multiple psychoactive substances, where it is uncertain which substance predominated.⁵⁷ It is not known whether these teenagers were drug users, although the combination of illicit substances in some cases may lead to speculation that this is the case. One of the deaths recorded in 2005, of a 17 year old who died from methadone and alcohol poisoning,

may be that of Danielle Scott, whose death was reported in the media.⁵⁸ She had mental health and behavioural problems, and was known to have engaged in drug and alcohol misuse.⁵⁹ She died after taking methadone and alcohol; the methadone prescribed to and supplied by a man she’d met that day, who later pleaded guilty to a charge of culpable homicide. The death of the two year old in 2005 is presumably that of Derek Doran, who died after drinking methadone, thinking it was a soft drink.⁶⁰ Both his parents were prescribed methadone, and media reports suggest that a child protection inquiry was carried out in the aftermath of his death. The original report did not include Scottish cases in its analysis, given that the system there is governed by different guidance; however, media reports were reviewed, which did identify Derek Doran’s death. No more information relating to the deaths in *Table 3* could be sourced from media reports.

In seeking to obtain more information about each individual death, the Crown Office Procurator Fiscal Service (COPFS) was provided with the statistics obtained by the NRS, and a request for information relating to these deaths was made under the Freedom of Information (Scotland) Act 2002.⁶¹ COPFS confirmed that the 35 methadone-related deaths had been reported, but failed to provide relevant information on any case. The COPFS routinely remove cases over five years old from their system, and stated that four of the 35

⁵⁶ WHO (no date published) *The ICD-10 Classification of Mental and Behavioural Disorders: Diagnostic criteria for research* (Web resource)

⁵⁷ *Ibid*

⁵⁸ BBC News (29 August 2006) *‘Addict admits methadone killing’* (Web resource)

⁵⁹ Judiciary of Scotland (30 July 2009) *Sheriffdom of Lothian and borders at Edinburgh, Sheriff John Horsburgh* (Web resource)

⁶⁰ Edinburgh News (6 March, 2006) *‘Methadone toddler ‘wasn’t on at risk list’* (Web resource)

⁶¹ Child drug-related deaths are reviewed by committees that sit within health boards in Scotland. The committee then reports these deaths to the Scottish Fatalities Investigation Unit, a unit within the Crown Office Procurator Fiscal Service (COPFS).

cases were no longer held. It would not release sensitive information on the remaining files due to confidentiality requirements, or because it did not consider the information to be in the public interest.

6. The prevalence of intentional administration

The lack of research on the prevalence of intentional administration of OST medications to children by parents or carers is in urgent need of rectification. Our knowledge of the incidence of this practice, together with an understanding of the driving factors and motivations behind it, is one of the most considerable gaps this research has identified.

Whilst it does consider OST specifically, a piece of research from 1996 sought to determine the epidemiology of Munchausen syndrome by proxy,⁶² non-accidental poisoning and non-accidental suffocation in the UK and the Republic of Ireland over a two-year period.⁶³ A total of 128 cases were identified: 55 suffered from Munchausen syndrome by proxy, 15 poisoning, 15 suffocation and 43 suffered more than one type of abuse. The majority of the children were aged under five – the median age being 20 months – and prior sibling abuse was not uncommon. On 85% of occasions, the perpetrator was the child’s mother, and eight children were known to have died as a direct result of their abuse, all from either poisoning or suffocating. The study identified 44 cases where a child was intentionally poisoned, 71% of which involved prescribed drugs. Anticonvulsants were the

group of poisons most commonly used (14 cases), and opiates were the second most common (8). Whether these opiates were prescribed or not is not commented upon.

The authors note that these forms of abuse are rare – the combined annual incidence in children under 16 was found to be 0.5/100,000, and for children under 1, at least 2.8/100,000. Yet, it is also stated that, as is common in many epidemiological studies, these calculations are likely an underestimation, and that these forms of abuse are underreported. While the three forms of abuse were found to be closely related, the authors concluded that it is unusual for non-accidental poisoning to occur alone. This research, however, primarily focuses on forms of abuse and intent to cause harm to the child. There is no evidence in SCRs or available literature to suggest that those cases that were deemed to have involved parental administration were driven by the parent’s desire to cause harm to the child. Rather, SCR evidence suggests that OST medication is administered to pacify, rather than deliberately harm the child.

One piece of German research sought to determine the extent to which children living with drug-using parents are in danger of poisoning from methadone and illegal drugs.⁶⁴ An analysis of hair samples from 149 children (aged 1-14) living with parents receiving a methadone prescription and/or suspected of misuse of illegal drugs, and from 124 of the parents was conducted. Only in 35 samples of

⁶² A form of child abuse whereby parents or carers fabricate childhood illnesses.

⁶³ McClure et. al. (1996) 'Epidemiology of Munchausen syndrome by proxy, non-accidental poisoning and non-accidental suffocation,' 75(57) *Archives of Disease in Childhood* 61

⁶⁴ Pragst et.al. (2013) 'Methadone and illegal drugs in hair from children with parents in maintenance treatment or suspected drug abuse in a German community,' 35(6) *The Drug Monit.* 737



children’s hair were no drugs detected. Methadone was identified 35 times, with additional use of illegal drugs indicated in 28 of these cases. It also found that drug use in the children’s environment was obvious for a range of illegal drugs; with cocaine, cannabinoids and heroin, in that order, being the most common.⁶⁵ Hair strands from younger children generally contained higher concentrations than from elder siblings. The authors discussed several possible explanations for the incorporation of drugs into the hair, including from smoke, through contact with contaminated surfaces or parent’s hands, after passive smoking, administration or oral intake by hand-to-mouth transfer. Evidence of ‘systemic incorporation’⁶⁶ of methadone, as well as illegal drugs, was found. The authors concluded that investigation of children’s hair proved a useful way to detect ‘endangering drug use in their environment,’ and to lead to a more thorough inspection, and measures to improve their situation in many of the cases. Whilst this research suggests that children whose parents receive OST or use illegal drugs are likely to be exposed to drugs in the home, it does not show how many of these involved deliberate administration by the parents.

Whilst requesting evidence of current ways of working from local authorities, Adfam became aware of a public health practitioner, based in England and specialising in substance use, undertaking research into the incidence amongst the general population of parental administration of drugs to

their children. SCR evidence, and anecdotal evidence from the treatment population (as reported by several professionals over the course of this research), suggests that the practice of parental administration of drugs to children is not as uncommon as one may hope, and early findings reported from this research corroborate this.

Our review of SCRs identifies a number of methods by which children come to ingest drugs (both prescribed and illegal) in the home, including through passive ingestion (e.g. inhalation of smoke)⁶⁷ and intentional administration for the purpose of pacification; yet, these possibilities are rarely recognised or accounted for. The fact that SRCs very often do not analyse the event of ingestion itself, and rarely make recommendations which address it,⁶⁸ presents an additional obstacle to raising awareness of intentional administration, and forming appropriate and effective policies to guard against this risk. Those that have made recommendations suggested that local areas take action to determine how commonplace a practice this may be amongst its OST-prescribed population, or to highlight the risks of giving children methadone.

7. The relative safety of methadone and buprenorphine

Research has tended to focus on the comparative effectiveness of methadone and buprenorphine at retaining clients in treatment, suppressing cravings or reducing illicit opioid use; meanwhile, very little has been done to examine their relative safety. However,

⁶⁵ In terms of illegal drugs, cannabinoids were found in 56 samples, and drug use in the children’s environment was obvious for heroin in 44 cases, cocaine in 73 cases, amphetamine or ecstasy in 6 cases and diazepam in 8 cases.

⁶⁶ This signifies that children were systematically exposed to the drug over a period of time, but does not prove that the drug was intentionally administered to the child by a parent/caregiver.

⁶⁷ Toxicology tests sometimes showed exposure to a variety of drugs over a length of time; which was thought, presumably, to have been as a result of passive ingestion through inhalation or contaminated environments.

⁶⁸ This is discussed in greater detail in Section Three.

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a study conducted in England to assess the relative risks of methadone and buprenorphine was published during the writing of this report.⁶⁹

Drawing mortality data from the ONS and methadone and buprenorphine prescription data from the NHS, the research sought to examine the population-wide overdose risk emerging from the prescription of methadone and buprenorphine for OST. In the period under review (2007-2012), it found that there had been 2,366 deaths related to methadone, and 52 to buprenorphine. This corresponded to 17.3 million methadone and 2.6 million buprenorphine prescriptions issued: the number of methadone prescriptions being seven times greater than the amount of buprenorphine prescriptions. These figures include deaths across all age groups, and of people both prescribed and not prescribed the medication, but the report does not consider risks to children specifically. The relative risk ratios of methadone and buprenorphine, by substance-specific overdose rate per 1,000 prescriptions issued, was calculated; showing the pooled overdose death rate as 0.137/1000 for methadone, and 0.022/1000 for buprenorphine (including buprenorphine-naloxone). This led to the finding that *'buprenorphine is six times safer than methadone with regard to overdose risk among the general population,'* causing the authors to conclude: *"Clinicians should be aware of the increased risk of prescribing methadone, and tighter regulations are needed to prevent its diversion."*⁷⁰

The report cites the NICE guidance recommending methadone as the preferred option where both drugs appear equally suitable, and states that the substantial difference in risk between the two drugs highlighted by these findings, together with previous reports of fatalities, means the treatment sector *'may need to reappraise its relationship with methadone.'* Furthermore, the authors highlight the challenges facing clinicians when deciding whether a person is complying – and is able to maintain compliance – with treatment, given that the identified risk of methadone diversion makes potential safety implications for persons other than the individual patient difficult to judge. Indeed, the risk of diversion is well established: a Danish piece of research⁷¹ into drug-related deaths between 2008 and 2011 found that only 44% of persons with toxicology findings of methadone were in opioid substitution therapy and receiving methadone at the time of death. Findings from English data in 2013 similarly showed that just 32.5% of the 256 people who died of methadone-related causes were known to be receiving a prescription for methadone – 67.5% were not.⁷² Ultimately, the report recommends that the risk of diversion and significant risk differentials between methadone and buprenorphine should inform individual treatment decisions, as well as treatment guidelines.

The significance of the study, however, should not be overstated: it is an observational piece of

⁶⁹ Marteau, McDonald and Patel (2015) 'The relative risk of fatal poisoning by methadone or buprenorphine within the wider population of England and Wales,' *BMJ Open* (Web resource)

⁷⁰ *Ibid*

⁷¹ Tjagvad et. al. (2014) *Drug-induced deaths and other drug related deaths in Denmark, 2008-2011.* (Web resource). See also: Heinemann et. al. (2000) 'Methadone-related fatalities in Hamburg 1990-1999: implications for quality standards in maintenance treatment?' 113(1-3) *Forensic Sci Int* 449

⁷² Claridge & Goodair (2015) 'Drug-related deaths in England, Northern Ireland, The Channel Island and the Isle of Man: January-December 2013,' *National Programme on Substance Abuse Deaths (NPSAD)*, St George's, University of London

research, in that it does not evidence causal links. The paper acknowledges its limitations: one being that the complexity of the client is not accounted for in the data and, thus, it is not possible to identify potential differences in the severity of drug dependence between clients prescribed methadone and buprenorphine. Research suggests that clients prescribed methadone are more likely to be complex than those prescribed buprenorphine.⁷³ In which case, the mortality risk amongst those prescribed methadone as opposed to buprenorphine would likely be higher.⁷⁴ However, evidence from a 2009 study⁷⁵ supports the above finding that buprenorphine carries less risk of mortality, whilst a French study reported that opioid overdose deaths had declined in France by 79% since the introduction of buprenorphine nine years earlier.^{76 / 77}

A retrospective cohort study of service users in New South Wales⁷⁸ compared crude mortality rates for methadone and buprenorphine for all-cause and drug-related overdose mortality. It found that whilst patients who began treatment with buprenorphine had reduced all-cause and drug-related mortality during the first few weeks of treatment, compared with those who started with methadone, for the remaining time on treatment, drug-related mortality risk did not differ. 'Weak' evidence suggested that

all-cause mortality was lower for buprenorphine than methadone. In the four weeks after treatment cessation, all-cause mortality did not differ, and drug-related mortality was lower for methadone. An earlier study, which sought to investigate the effect of OST at the different stages of treatment and according to its duration, similarly found no variance in the risk of death between buprenorphine and methadone when comparing the whole period on and off treatment.⁷⁹ However, this study solely considered all-cause mortality, and did not look at the quality of the different interventions provided.

A recent guideline for the use of OST medications in treatment, published in the USA,⁸⁰ recommended further research into the comparative advantages of the different drugs used in OST; stating that whilst methadone, buprenorphine and other drugs used in the treatment of opioid dependence have been proven to be superior to receiving no treatment, much less is known about their relative advantages to one another. Given the disparity between the number of child deaths and hospitalisations related to methadone compared to buprenorphine, a deeper analysis of the respective risks, whilst accounting for relevant variables, should be carried out.

73 Marsden et. al. (2014) 'Development of the Addiction Dimensions for Assessment and Personalised Treatment (ADAPT)' 139(1) *Drug Alcohol Depend* 121

74 The method by which the number of doses of buprenorphine prescribed is also based on a mean estimate, derived from data from a small sample size of 14 treatment services that responded to the request for data. Despite this, the assertion that buprenorphine is six times safer is precise, and one may have assumed a wider range of values would be proposed e.g. 'three to nine times safer.'

75 Bell et. al. (2009) 'Comparing overdose mortality associated with methadone and buprenorphine treatment,' 104(1-2) *Drug Alcohol Depend* 73

76 Auriacombe et. al. (2004) 'French field experience with buprenorphine,' 13 *Am J Addict* 17

77 See also: Auriacombe et. al. (2001) 'Deaths attributable to methadone vs. buprenorphine in France,' 285(1) *Am Med Assoc*

78 Kimber et. al. (2015) 'Mortality risk of opioid substitution therapy with methadone versus buprenorphine: a retrospective cohort study,' *The Lancet Psych*

79 Cornish et. al. (2010) 'Risk of death during and after opiate substitution treatment in primary care: prospective observational study in the UK General Practice Research Database,' *BMJ* 341

80 Kapman and Jarvis (2015) 'American Society of Addiction Medicine (ASAM) National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Use,' 9(5)

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The number of methadone prescriptions in England and Wales has gradually decreased over recent years, following a peak of 3.1 million in 2010,⁸¹ whilst the proportion of buprenorphine to methadone prescriptions has increased from 14% in 2007, to 18% in 2012. The number of buprenorphine and buprenorphine-naloxone prescriptions dispensed in England and Wales has also risen, with buprenorphine-naloxone⁸² having accounted for 0.4% of all prescriptions in 2007, and 2.6% in 2012. Whether this increase is driven by a growing belief in the greater safety of the drug in comparison to methadone is not reflected upon in the research.

8. Conclusion

Ascertaining an estimate of the true number of child ingestions of OST medications proved challenging in the original report: there was no publicly accessible data on the number of ingestions, fatal or otherwise. The most reliable method, albeit recognised as limited, was to collate SCRs involving child ingestions of OST drugs, which revealed 23 ingestions and 17 fatalities in the period between 2003 and 2013. Given that not all deaths will result in a SCR, and that SCRs will not provide an indication of the number of 'near misses', it was acknowledged that using SCRs as a way of measuring the incidence of child OST ingestions would provide an inadequate snapshot of the scale of the problem.

Taking this new data from all four countries of the UK together, it is evident that the 17 deaths uncovered by the SCRs constitute a fraction of the total number

of child deaths attributed to OST medications during that period. Indeed, between 2003 and 2013, at least 110 persons aged 0-18 died from methadone or buprenorphine poisoning in the UK. This only includes one of the deaths in the English and Welsh data relating to buprenorphine poisoning, given that we do not know how many of the 19 deaths recorded involved under-18s, with the exception of one; with which the SCR was able to be cross-referenced. However, it is unlikely that this was the only death involving a person aged 18 or under. The data from England and Wales shows that of the 72 methadone-related deaths involving persons up to the age of 18 inclusive, only six resulted in a SCR. This means that an additional 66 deaths did not lead to a SCR. We do not know the proportion of deaths in Scotland that resulted in a significant case review.

The hospital admissions statistics add to this startling picture of the reality of OST ingestion in children: at least 310 children under 18 were admitted to hospital with methadone poisoning between 2003 and 2013, and a further 18 in 2013-14. Again, this is an underestimation, since for much of this period the HSCIC's breakdown of age did not allow for distinction between children aged 15 and above and adults, and statistics on the number of children admitted to hospital with buprenorphine poisoning were not available. The data also relates only to England, thus it may be assumed that more children have been hospitalised due to OST drugs in the UK over this period.

⁸¹ Marteau, McDonald and Patel (2015) 'The relative risk of fatal poisoning by methadone or buprenorphine within the wider population of England and Wales,' *BMJ Open* (Web resource)

⁸² Buprenorphine-Naloxone is a combination medication used to treat opioid dependence and prevent withdrawal. Often referred to by its brand name, Suboxone.



A further distinction that can be drawn from the findings of the original report is that of the age of the children. The cases of child ingestions reported in SCRs suggested an age bias towards very young children: recall that the median age of children subject to the SCRs was just two. However, it seems from the mortality statistics that the majority of children ingesting OST medications are adolescents; although, we do not know how they came to access the medication or the circumstances around the ingestion itself. The data from Scotland may suggest that some of these adolescents were drug users (given the classification code or mixture of substances found in the body), and that others took the drug in a suicide attempt, but in the absence of further information – or indeed a SCR – the precise circumstances are unknown. We know methadone is commonly misused amongst adults,⁸³ and the Scottish data and SCR evidence suggests that adolescent deaths attributed to OST medications are often linked to drug use or suicide, but this cannot be confirmed against the data available. In light of this new evidence, further research into how and why adolescents are coming to ingest methadone and buprenorphine is needed to inform work to reduce fatalities in this group.

The reason why these additional deaths and ingestions did not lead to a SCR is not known. It is open to speculation whether this is as a result of varying thresholds in local authorities, or differences in the facts of the cases, such as a lack of professional involvement or suspected abuse or neglect. In the

absence of a SCR or further information relating to these deaths, the respective number of cases of parental intentional administration and accidental ingestion cannot be ascertained, nor can we know to whom the methadone was most commonly prescribed or on what regime i.e. supervised consumption or take-home doses. This evidence is therefore limited in terms of what it can tell us about patterns of child ingestions; and consequently, what to prioritise in terms of policy and practice around safeguarding children from the risks posed by OST medications. To address this, the government should have consideration for the adoption of national standards for reporting of child ingestions of OST medications, and clarification on SCR thresholds.

The finding that buprenorphine carries significantly less overdose risk for the general population than methadone is worthy of attention, and has been supported by several other research study findings. Despite the fact that none considered the risks to children specifically, such evidence of the comparative mortality risks between methadone and buprenorphine should nevertheless be borne in mind by clinicians when assessing the respective suitability of the drugs for all clients, especially those in contact with children.

The application of NICE guidance advising that methadone should be prescribed in cases where both methadone and buprenorphine appear ‘equally suitable’, may have resulted in methadone becoming the ‘default’ option, with insufficient consideration given to the risks to children. Such clinical practice

⁸³ Marteau, McDonald and Patel (2015) ‘The relative risk of fatal poisoning by methadone or buprenorphine within the wider population of England and Wales,’ *BMJ Open* (Web resource)

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should be reassessed in light of this new evidence, and clinical guidance should clarify precisely under what circumstances methadone and buprenorphine may not be equally suitable for a client. It is hoped that the revision of the 'Orange Book' clinical guidelines, expected next year, will provide greater clarity.⁸⁴ In addition, the cost implications often cited as a reason for methadone being prescribed may suggest the need for commissioners to complete a cost-benefit analysis, to include differences in risk of overdose and death in children and adults.⁸⁵ However, it must not be forgotten that treatment in itself offers a protective factor for the child.⁸⁶ Whilst safeguarding children must be the primary concern of professionals working with the family, it is also important to ensure that parents in treatment feel sufficiently supported and are provided with suitable and agreed recovery or care plans, to maximise the probability of engagement with treatment.

⁸⁴ Details of Adfam's contribution to the consultation of these guidelines is discussed in Section Four

⁸⁵ This may become even more pressing given the continuing cuts to Public Health budgets.

⁸⁶ Adfam (2014) Medications in Drug Treatment: Tackling the risks to children

Section three: Serious Case Reviews

Section three: Serious Case Reviews

Serious case reviews are intended to provide an opportunity for agencies and individuals to learn lessons and to improve their methods of working, in order to effectively safeguard and promote the welfare of children.⁸⁷ Since the publication of the original report, three more SCRs involving OST ingestions by children in Blackpool, Birmingham and Oxfordshire have come to light. As of October 2015, the Birmingham review had not yet been published, although the facts of the case were found in media reports.⁸⁸ The facts and findings of Blackpool's 'Child BT' (2015) and Oxfordshire's 'Child H' (2014) SCRs bear striking resemblance to those of the SCRs examined in the original report. Serious case reviews identify opportunities for learning and make recommendations to prevent similar incidents occurring in the future. The 'Child H' overview report also contains a list of changes implemented as a result of the case. The full overview reports are accessible via the NSPCC's national repository of serious case reviews.⁸⁹

1. Summary of facts, findings and recommendations

The facts of the two published serious case reviews are similar: both involve a child's ingestion of methadone ('Child BT' was two years old and 'Child H' 21 months), which was prescribed to the mother and deemed to have been accidentally ingested by the children. One ingestion proved fatal (Blackpool, 'Child BT'), whilst the other child made a full recovery (Oxfordshire, 'Child H'). The parents of 'Child BT' and the mother of 'Child H'

have received custodial sentences. The main points to draw from these cases are discussed below.

– **Safe storage**

In neither case was the methadone stored safely in the home: in 'Child BT's' case, the methadone was found in children's feeding cups and fruit juice bottles, and in 'Child H's' case, it was left in a room with the child, unsupervised. In the latter, the mother was on a daily pick-up dispensing regime: she reportedly left the methadone in a child-resistant bottle in her handbag, left the room and 'Child H' then drank the contents. It is not discussed in the overview report how a child was able to open a child-resistant cap; which is, according to the WHO and UNICEF, one of the best-documented successes in preventing accidental poisoning in children.⁹⁰ Standards for child resistant packaging require that it should be tested by asking a group of children aged between 42 and 51 months to open a pack. If they have not opened it within five minutes, they are shown how to open it and given another five minutes to try again. At least 85 per cent of children should be unable to open the child resistant packs within the first five minutes, and at least 80 per cent still unable following the demonstration.⁹¹ Whilst this suggests that child resistant packaging is mostly very effective, the BSI⁹² admits that no container designed for everyday use can be '*guaranteed to be totally child-proof*,' and highlights the importance of further safety precautions with dangerous products, including keeping medicines out of the reach of

⁸⁷ Department for Children, Schools and Families (2010) *Working together to Safeguard Children Chapter 8: Serious Case Reviews*

⁸⁸ *The Mirror* (5 March, 2015) 'Fenton Hogan: Serious Case Review launched into tragic toddler's death.' (Web resource)

⁸⁹ NSPCC National case review repository. Available at: <http://www.nspcc.org.uk/preventing-abuse/child-protection-system/case-reviews/national-case-review-repository/>

⁹⁰ BSI Group (date unpublished) *Child resistant packaging: A consumer's guide to the standards for child resistant packaging.* (Web resource)

⁹¹ *Ibid*

⁹² BSI is the UK National Standards Body which develops standards to make products and services safer for consumers. Standards set out good practice and guidelines for organizations to follow. BSI is the UK member of European standards organization CEN.

children, always storing chemicals in their original containers and safe disposal.⁹³

In contradiction to this advice, the parents of ‘Child BT’ were found to have been selling the methadone prescribed to the mother, to a buyer who wanted it sold in the original bottle. This was the explanation provided by the mother as to why the methadone had been stored in various receptacles around the home, although this justification is not explained in the SCR report.

Safe storage was reportedly discussed with the client in the two cases, although ‘Child BT’s’ mother denied ever having been given advice on safe storage or provided with a lockable box. In the case of ‘Child H’, the health visitor was considered to have drawn an ‘*arbitrary distinction*’ between the issue of safe storage and the hazards represented by other household materials, and did not consider it within the scope of her role to check on storage arrangements. It was recommended to the health visiting service that the issue of safe storage be included in discussions about accident prevention.

– **Parental substance use**

In Child BT’s case, it was suggested that because professionals in the area had a significant number of problem drug users on their caseloads, professionals potentially normalised chaotic or risky behaviours; therefore overlooking the ‘*signs, symptoms and safeguarding issues associated with problem drug use.*’ The panel stated:

“Despite the complexity of their daily lives, Child BT’s family did not stand out as unusual to professionals who see many similarly complex families in Blackpool..Other serious case reviews have shown that when professionals work with many similarly complex families it can result in them becoming less perceptive to the level of complexity and the associated risk and impact over time.”

The extent to which professionals understood the thresholds for statutory intervention, and what constituted significant harm, was also found to be inconsistent, and appropriate action was not always taken.

An insufficient appreciation of risk was likewise identified in ‘Child H’s’ case. In particular, the health visitor was deemed to have ‘*little knowledge about the impact on parenting of drug use or the risks associated with being on methadone and did not consider it her role to address the safe storage of methadone.*’ The review panel stated that because health visitors in the area worked with many substance users, she should have accessed training available through the LSCB. The normalisation by professionals of ‘aberrant’ behaviours was highlighted in the review, and the mother’s dishonesty was found to have been accepted without challenge. The overview report stated that children’s social care had since introduced mandatory toolkits covering neglect and substance misuse, and were undertaking work to clarify expectations of a ‘team around the child,’ in response to the case. Recommendations included

93 *Ibid*

training health visitors and the police, to highlight the impact of parental substance use on the ability to parent.

Adfam's original report recommended that, in order to ensure that parental substance use is adequately prioritised in the local agenda, drug practitioners should be represented on the LSCB and review panels for cases involving parental substance use. It is stated in the 'Child H' overview report, having cited *Medications in Drug Treatment*, that the need for 'further expertise' on the panel was recognised, which led to the appointment of a commissioning manager for the public health drug and alcohol action team. The 'Child BT' panel also included representation from drug treatment professionals. This is encouraging, and drugs workers should continue to be represented on future review panels in all cases where parental substance use is a factor.

– **Professional curiosity and challenge**

A common finding between the cases was that professionals working with the family were overly optimistic, with a 'tendency to accept at face value the [mother's] claims' ('Child H'). The parents of 'Child BT' had been selling methadone, which was prescribed to the mother, for some time. This may have gone unnoticed given that 'Child BT's' father rarely participated in discussions about the children's health and wellbeing, and would frequently excuse himself when professionals visited the home. It was known that 'Child BT's' father had a long history of drug use and was potentially vulnerable to relapse.

Furthermore, he would not agree to a Common Assessment Framework (CAF)⁹⁴ – the standardised approach to conducting an assessment of a child's needs and deciding how they should be met – and this was accepted without challenge. It was known that 'Child BT's' mother was not consistently complying with treatment, by using illicit drugs; yet sufficient action was not taken and no whole family assessment was carried out. The review panel asserted that drug services should be able to recognise the features of non-compliance (such as providing 'false' urine samples), and recommended that 'all drug-using parents be drug tested via swab tests if this is a more accurate and reliable test result.' Drug services must also acknowledge, it stated, that 'there is a market for the purchase of methadone.' 'Child BT's' mother and father, when interviewed as part of the review process, both commented on the over-optimism of professionals working with the family.

Throughout the period of the 'Child H' review, many instances of parental deceit and disguised compliance were observed. The mother hid her involvement in criminal activities – which included selling and using illicit drugs – and lied about appointments, her methadone dosage, whereabouts, 'Child H's' attendance at children's centres and arrests.

The 'Child BT' review panel recommended that non-compliance result in immediate action to bring multi-agency professionals together to discuss

⁹⁴ A multi-agency package of support put in place to help families who may be struggling for a variety of reasons.



the case, and that safeguards, such as supervised consumption, be put in place to reduce the potential for disguised compliance.

– **Joint-working and information-sharing**

During the periods under review, both families were in contact with a number of services, including health visiting, children’s social care, drug services, police, GPs and hospital services. Again, the review panels found that information-sharing amongst the agencies involved with the family was generally of ‘*variable quality and consistency*’ (‘Child BT’). The panel in ‘Child BT’s’ case found that robust systems and processes for sharing information were absent, and that inter-agency working to safeguard children of problem drug users needs to be strengthened.

In the case of ‘Child H’, the review panel acknowledged the ‘*good deal of inter-agency information exchange,*’ but indicated a number of strategic obstacles to ‘*achieving a clear and complete picture across the local agency network,*’ including a lack of contact between the GP and health and other colleagues, as well as the GP’s failure to respond to repeated requests for information from the hospital service. The fact that the child was subject to a child protection plan was judged not to be sufficiently visible on the police force’s databases and systems, and there was an ‘*unjustified*’ reluctance to share intelligence by the police, with children’s social care, about the mother’s ‘*drug-related lifestyle.*’ The review additionally found evidence of ‘*unjustified presumptions*’ by professionals about what colleagues in other agencies would, or should, be doing. This included presumptions by GPs that health

visitors would initiate contact on behalf of the practice, presumptions by GPs and drugs workers that the other would initiate a conversation ‘*if need be*’ and the health visitor’s assumption that ‘*her role was to look forward not back (and avoid any discussion about drugs).*’

The panel stated that pharmacists need to be reminded of the expectation that children’s services and/or the police should be informed if they are concerned a client poses a risk to their child, and recommended that the police conduct a scoping exercise into the viability of making routine referrals to children’s services about parents or carers with substance misuse issues. It also stated that the LSCB should encourage commissioners of GP services and public health commissioners to review their monitoring processes, in order to ensure collaborative management of contracted services provided in general practice, especially drug and alcohol services. Overall, an ‘*inward focus*’ was identified: agencies focused too narrowly on their own particular role, and assumed that other agencies would initiate communication should a problem or concern arise.

Since then, children’s social care in Oxfordshire is reported to have started routinely monitoring and reporting the attendance rates of partner agencies at child protection conferences and ‘core groups.’ The harm minimisation service also incorporated a system of audit of clinical practice, to provide an accurate picture of the quality of practice and to identify trends or issues in joint-working. In neither of these cases did an agency or professional take the lead in working with the family.

2. Other cases

As noted above, Adfam was alerted to the undertaking of another SCR, involving the ingestion of OST medication by a child in Birmingham, Fenton Hogan. Since the review has yet to be published, the facts of the case have been sourced from media reports; according to which, a 23-month-old child died after being administered methadone by his mother, in order to help him sleep.⁹⁵ Methadone bottles were found lying around the home, and the child's mother was served a custodial sentence for manslaughter. As is common in media reporting on such cases, the focus lay on the criminal proceedings brought against the parent, and lacked any real analysis of policy and practice considerations of OST and safeguarding.

Local news reports also revealed that a two year old in Plymouth was hospitalised after finding a wrapper containing Subutex⁹⁶ in a playground and swallowing it, thinking it was a sweet.⁹⁷ The toddler made a full recovery, and the article contained no further information specific to OST; stating simply that Subutex is used to treat heroin dependence. A similar incident, where a methadone bottle containing approximately a tenth of its original contents was found in a children's play area, has also been reported.⁹⁸ These incidents differ from the other cases considered as part of this research, in that the drug was found on the floor of a playground, and was not prescribed to the child's parents. No SCR will be conducted, given that abuse or neglect are

not involved, and the second case did not involve an ingestion but a 'near miss.' The news report suggests that the police were not informed nor was Plymouth City Council said to be aware of the incident. The person to whom the Subutex was prescribed and the reason for its being in the playground is unknown.

Whilst the scope of this research is limited to drugs used in OST, it is also worth considering a SCR⁹⁹ involving a 23-month old child's death from a heroin overdose, based on the striking similarity of the facts, findings and recommendations of the case to the SCRs considered as part of this research. The child reportedly died after swallowing a 'wrap' of heroin, although toxicology tests showed that he had been regularly exposed to a number of illegal substances over time (suggesting passive ingestion through, for example, inhalation or a contaminated environment). Both parents had been in receipt of a methadone prescription, and the family was in contact with a range of services. The review found that despite 11 multi-agency child in need meetings, relevant information was not always shared, and there were many 'missed opportunities.' The parents' engagement with services was patchy, and there was insufficient enquiry by practitioners about the parents' drug use and their consideration of the child's safety. The panel concluded that had practitioners exercised greater professional curiosity and been more assertive with the family, the death may have been avoidable. Recommendations focused on improving safeguarding risk assessments,

⁹⁵ *The Mirror* (5 March, 2015) 'Fenton Hogan: Serious Case Review launched into tragic toddler's death' (Web resource)

⁹⁶ Subutex is the brand name for buprenorphine.

⁹⁷ *The Herald* (9 September, 2015) 'Toddler ate heroin substitute in Plymouth playground thinking it was sweets' (Web resource)

⁹⁸ *Edinburgh News* (11 December, 2012) 'Methadone bottle found at children's play area' (Web resource)

⁹⁹ *Wolverhampton*, 'Daniel' (2013)

inter-agency working and collaboration, workforce knowledge and competency, recognising the impacts of parental substance use and ensuring a family focus.

3. Conclusion

The features of these cases are all too familiar; and many of the conclusions reached in the original report should be reiterated. The bias towards younger children remains apparent, as does the practice of unsafe storage of drugs in the home and an insufficient appreciation of the dangers of OST drugs to children. In the ‘Child BT’, ‘Child H’ and the (as yet unpublished) Birmingham SCRs, the methadone was prescribed to the mother. The families subject to these reviews were in contact with a range of different agencies, and recommendations again focused on improving information-sharing, inter-agency collaboration, professional awareness of the risks associated with OST, recognising disguised compliance and the professional tendency towards over-optimism. The review panel in ‘Child H’ made reference to Adfam’s conclusion in the original report; that the frequency and similarity of cases involving child ingestions of OST drugs shows that learning from these cases is not taking place.

The need for this learning to be shared to prevent future incidents of child ingestions and raise awareness of the risks of OST medications to children thus remains. The health visitor in ‘Child H’s’ case was found to be insufficiently aware of the risks of methadone and its impact on parenting, and did

not consider it her responsibility to check on safe storage. The panel stated that she should have accessed training via the LSCB; which suggests that whilst training for health visitors on parental substance use was available, she had not undertaken it. The panel consequently recommended a review of health visiting training needs in relation to parental substance use and its impact on parenting. Consideration should be given to the mandatory training of multi-disciplinary professionals in areas where there are a large number of substance users, and efforts must be strengthened to encourage all professionals to realise their responsibility to protect and safeguard children. One method of ensuring that SCR learning is disseminated at least locally was endorsed by the panel in the ‘Child H’ case (after having been proposed by the local clinical commissioning group which participated in the review process): that summaries of SCRs should be circulated in local newsletters and briefings, and training events should include a section on SCR learning.

SCRs have been subjected to criticism, including for having ‘*too much emphasis on getting the process right, rather than on improving outcomes for children.*’¹⁰⁰ Some reviews have also been criticised for concluding that harm to children was not predictable, despite obvious warning signs.¹⁰¹ It is not the aim of this report to assess the quality of individual SCRs, or comment on the efficacy of the system overall. It is important to note, nonetheless, that SCRs do not always aim to discuss the details of

¹⁰⁰ Professor Eileen Munro (2011) *Munro Review of Child Protection: A child-centred system*

¹⁰¹ See, for example, *The Guardian* (November 13th 2013) ‘Hamzah Khan: Minister has ‘deep concerns’ over review findings’ (Web resource)



a single event in which a child has come to harm, but focus on investigating the professional engagement with the family, with a view to learning lessons and identifying areas which could be improved to reduce the risk of future incidents. Whilst this is, of course, important, research undertaken by what was then the Department for Children, Schools and Families found that *‘local overview reports often provided insufficient information to achieve a clear understanding of the case and the incident which led to the children being harmed or killed.’*¹⁰² This could lead to limitations when trying to improve policy and practice to prevent children coming to harm. The role of the Association of Independent LSCB Chairs in England, the Scottish Child Protection Committee Chairs Forum, the Safeguarding Board for Northern Ireland, and the new National Independent Safeguarding Board in Wales should not be overlooked; with duties to promote the effectiveness of LSCBs and SCRs, they are in a prime position to take the lead on an initiative to improve the usefulness of learning derived from SCRs.

In the ‘Child BT’ overview report, it is stated that the police recovered a child’s feeding cup in the yard of the family home, which was later found to contain methadone. The second post-mortem revealed the underlying cause of death as methadone poisoning. The mother explained that methadone was stored in various receptacles in the house because she was selling it. A discussion of ‘significant events and

analysis’ in the report focused solely on practice, and the event (the ingestion) which caused the child’s death was not analysed. Nowhere in the report was consideration given to further exploration of why methadone was found in a child’s cup, or whether there was a possibility of intentional administration. This may indicate a lack of awareness of the practice, and subsequent consideration by professionals. Research to uncover more information about the prevalence of parental administration of medications to their children is vitally needed.

A summary of the most common recommendations of SCRs involving child ingestion of OST medications would place the necessity of effective joint-working and strong information-sharing at its core. ‘Missed opportunities’ identified in these cases are often related to a lack of communication amongst professionals working with the family, and efforts to strengthen local joint-working are imperative to an effective safeguarding policy for children whose parents or carers are prescribed OST drugs. It is unlikely that any one change could have prevented these incidents; rather, a much more strategic, coordinated response is required. This could be facilitated by effective mechanisms for sharing the learning from individual SCRs, locally and nationally, and a national review of SCRs to identify trends and patterns.

¹⁰² DCSF (2008) *Understanding Serious Case Reviews and their Impact: a biennial analysis of serious case reviews between 2005 and 2007*

Section four: A follow-up of the recommendations

Section four: A follow-up of the recommendations

Since the publication of the original report, Adfam has continued to work to raise awareness of the issue, and help share best practice, so that the risks to children posed by OST drugs are minimised. This section sets out Adfam's work over the past year to improve local and national responses to the issue.

Best practice training for local authorities

As well as meeting with and presenting to hundreds of practitioners and stakeholders in the children's, health, social care and drug sectors to disseminate and publicise the issue and the report's findings, Adfam also developed a multi-agency training package for local authorities that want to improve local practice and joint-working. Throughout September 2015, Adfam worked with experienced trainers to deliver this training to four pilot areas. A total of 58 practitioners from a range of services were trained, including treatment providers, children's social care, health visitors, prescribers, the police and probation, and an evaluation revealed positive results. Practitioners commented on the invaluable opportunity provided by the training to build relationships with colleagues from other agencies, and to share experiences and knowledge. For example, a health practitioner stated, *'I thoroughly enjoyed meeting other services and understanding each other's roles better.'* Other feedback suggested that attendees welcomed practical information, such as how to recognise the signs of OST ingestion in children, and the impact of parental substance use generally.

This training will be delivered to a further 15 local authorities across the country before 2016. Local

authorities in England and Wales were contacted with information on the training, and requested to submit an expression of interest should they wish to participate. By October 2015, 34 local authorities had registered their interest. The 15 local authorities to which Adfam will deliver training in 2015 were selected based on two criteria: whether they had experienced a child ingestion of OST medications locally, and numbers of parents in receipt of a prescribing intervention.

The aim of the training is to develop a blueprint to enhance local practice regarding safeguarding the children of OST-prescribed service users, based on the learning from national SCRs. It is designed to help practitioners:

- Make appropriate risk assessments for children living with an adult prescribed OST drugs
- Consider the evidence base on the impact of parental substance use generally
- Conduct improved welfare checks for children, including signs of drug ingestion
- Create and implement a shared safety plan to enhance local practice, and
- Identify mechanisms to establish inter-agency partnerships and future joint-working

The impact of the training and the extent to which it improves local practice is largely dependent on multi-agency attendance from a mix of frontline professionals and managers, and a continued effort by different local services to work together and share information to identify risk and effectively implement adequate safeguards.

Wider policy influencing

As noted earlier, following the publication of the original report, Adfam presented the findings and recommendations to hundreds of professionals in the health, social care and drug sectors, and met with a range of organisations and individuals to raise awareness of the issues and embed the report's recommendations.¹⁰³ In terms of wider efforts to highlight the issues identified in the original report, Adfam responded to consultations by the Department of Health (DH) and the Care Quality Commission (CQC).

The DH invited feedback on the 'Orange Book' clinical guidelines,¹⁰⁴ to which Adfam responded¹⁰⁵ in September 2014. The guidelines are rightly considered by the drug treatment sector, alongside NICE guidance, as the cornerstone of evidence-based practice in drug treatment. Adfam, in its submission, detailed how families can best be included in the guidelines, how their role can be harnessed to support service users through their treatment journey and how children can be effectively safeguarded from the risks of OST medications. The following priorities were highlighted:

- Assessments of risk should include enquiries about contact with children, as well as children living with or dependent on the service user, with particular attention paid to males. Adfam also submitted that the safety of prescribed medication should form an important element of the care or treatment plan

- A wider social and whole family approach to treatment should be adopted by all agencies: working with the family is everyone's business. Adfam suggested a sub-section be incorporated into the guidance dealing specifically with the issue of professional competency, given the evidence gathered by Adfam showing that there is significant variation in professional skills and attitudes
- Risks to children should be the primary consideration when deciding which drug to prescribe and whether to allow take-home doses. Adfam is of the opinion that the current wording of the guidelines needs to be strengthened and elaborated; to stress the toxicity of methadone to children in even very small doses, to ensure that children are the primary consideration in any assessment, to encourage communication between the prescriber and dispensing pharmacist about safe storage and use of medications, to emphasise the necessity of input from other professionals and, in particular, the role of professionals visiting the home
- Current guidelines insufficiently emphasise and prioritise the risk of methadone overdose to children. The current statement that '*if both [methadone and buprenorphine] appear equally suitable, methadone should be prescribed as the first choice,*' has potentially led to the use of methadone as a 'default' option by clinicians. In its submission, Adfam asserted that both drugs may in fact not be equally suitable for clients who could pose a risk to children by storing or using the medication inappropriately

¹⁰³ A list of agencies and individuals presented to and met with is included in Section One

¹⁰⁴ Department of Health (2007) Drug Misuse and Dependence: UK Guidelines on Clinical Practice

¹⁰⁵ Available to download at: http://www.adfam.org.uk/cms/docs/Adfam_Response_-_Orange_Book,_Clinical_Guidelines_Review.pdf (pdf)



- The guidance states that even where there are concerns about the safety of medicines stored in the home and risks to children, ‘*take-home doses might be permitted but the dose taken home limited by dispensing frequency.*’ Adfam suggested that this be wholly removed, given that it potentially devalues the importance of children’s safety. Further guidance on the processes governing progression from supervised consumption to take-home medication was also requested.

Throughout the response, Adfam continually emphasised the importance of safe storage and checks on storage arrangements. The need for inter-agency cooperation was similarly accentuated, and the utility of home visits articulated. The revised guidelines are expected in 2016.

Adfam submitted a response¹⁰⁶ to the CQC’s proposals for inspecting and rating providers of substance misuse services in March 2015, and again highlighted the issues around child OST ingestion and the necessary safeguarding implications, including:

- In order to assess the ‘safe management of medicines’ – one of the CQC’s key lines of enquiry – including prescribing, recording, handling, storage, safe administration and disposal, attention must be paid to the risks posed by take-home prescriptions to children, especially drugs used in OST
- In inspecting and rating a service’s safety, it is advisable to gather information on the policies and procedures in place relating to OST, take-home medications and assessing risks to children
- A service rated ‘outstanding’ on its safety indicators should have robust policies and procedures in place, which recognise and prioritise risks to children posed by OST medications – without which, a service should not be called ‘outstanding.’

Adfam hopes that the multi-agency training programme and recommendations to both the Care Quality Commission and the Department of Health consultations will result in a more coordinated response to minimize the harm to children caused by OST medications.

¹⁰⁶ Available to download at: http://www.adfam.org.uk/cms/docs/Adfam_-_CQC_How_we_regulate_specialist_substance_misuse_services_consultation_response_-_March_2015_FINAL.pdf (pdf)

Section five: Conclusions and recommendations

Section five: Conclusions & recommendations

This report sought to build upon the knowledge and learning of the original report, provide updated information and statistics, and assess the extent to which the recommendations of the original report and those of SCRs have been implemented. It is hoped that it will further contribute to the ongoing debate about OST and the implications for safeguarding policies and practice, and inspire meaningful and sustainable change. However, Adfam is clear that these discussions should not endanger the rightful place of prescribed OST medications in a recovery-orientated treatment system. The unmistakable dangers of OST drugs to children must be explored without fuelling an unhelpful debate over the use of substitute prescribing in treating drug dependencies – the evidence in support of which has long been well-established.

Since 2003, at least 328 children in England have been admitted to hospital with methadone poisoning. Between 2003 and 2013, at least 110 children in the UK have died from methadone (107) and buprenorphine (3) poisoning. These data provide a much more accurate reflection of the scale of child ingestions of OST medications, and it is hoped that this will inspire a nationally-driven, coordinated response to tackle the issue. However, the mortality data is limited in what it can tell us about the circumstances of these deaths and, as a result, is of limited help in informing a coherent and effective policy mandate to minimise this risk to children.

Evidence relating to the comparative safety of

methadone and buprenorphine is a welcome addition to the debate, and should encourage a wider discussion of their relative benefits when prescribing to clients with children, including a review of current guidance to ensure it sufficiently highlights the particular risks of methadone to children. The number of child (and adult) deaths attributed to buprenorphine is significantly less than those to methadone, and available evidence suggests that buprenorphine presents less mortality risk. On this basis, it seems that the wider prescribing of buprenorphine to parents in treatment, when combined with adequate safeguards, such as safe storage, robust risk-assessments (reflected in the prescribing and dispensing regimes), good inter-agency cooperation, efficient information sharing and a curious and challenging workforce, could contribute to the effective management and minimisation of the dangers of OST to children. As Lord Laming stated, *‘Doing the basic things well keeps children safe.’*¹⁰⁷ We cannot say with any certainty the degree to which any or all of these measures reduce risk, but this report presents strategies and examples of practice for practitioners to improve their ways of working to this end.

In gathering evidence of local changes, with a view to identifying and highlighting good practice, as well as gaps, over 25 local authorities were asked to submit evidence. Eleven respondents provided a variety of materials. Whilst local practice inevitably differs in tackling the issue, a number of key points were highlighted. Despite these promising, albeit

¹⁰⁷ Lord Laming (2003) *The Victoria Climbié Inquiry Report*

few, examples of local practice, the SCRs discussed above show that children are still dying and coming to serious harm after ingesting OST medications. Moreover, the similarity between the facts and recommendations of the SCRs considered in both this report and the original suggests that national learning is still lacking, and more should be done to minimise this risk to children. In addition, national recognition and awareness of the issue is below what it should be considering the scale of the problem.

Not enough is being done to manage risk and reduce the number of child ingestions of medications used in the treatment of opioid dependence. The original report identified a number of key issues, and this report has confirmed their continuing relevance. As such, the main issues are set out below, together with the associated recommendations from the original report; amended to reflect whether they have been followed up. New recommendations are also made in light of new evidence.

Issue 1: National learning from SCRs is lacking

Original Recommendation: Full overview reports of Serious Case Reviews involving OST drugs should be centrally analysed by Government-appointed researchers. Further research into these cases and the learning from them, including an analysis of what was changed at the local level and how this was evaluated, is warranted. There should also be a commitment to collect and review any OST cases across the UK biennially and examine the key learning points for practitioners, the implementation of new recommendations and any

lessons for good practice.

The Department for Education or Ofsted would be best placed to carry out this work.

New Recommendation: These biennial analyses should be disseminated to relevant practitioners and organisations. The national bodies – the Association of Independent LSCBs in England, the National Independent Safeguarding Board in Wales, the Scottish Child Protection Committee Chairs Forum and the Safeguarding Board for Northern Ireland – are in a prime position to both collate and analyse reviews and disseminate learning to the Local Safeguarding Children Boards.

Issue 2: The effectiveness of SCRs

Original Recommendation: A representative from a drug treatment agency should be present on all Local Safeguarding Children Boards, to ensure that lessons relating to parental substance use are properly prioritised locally. Drug treatment services should also be represented on the review panel for any serious case reviews where the parents' drug or alcohol use is relevant.

Issue 3: A lack of publicly available information and data around the issue

Original Recommendation: Data should be collected centrally on the number of parents prescribed different OST drugs, and on which supervision regimes. It would also be beneficial to analyse whether these cases involved accidental ingestion by the child or intentional administration by the parent(s). Collection of this data should be the responsibility of Public Health England (PHE) or the Department of Health.

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New Recommendations: Hospitalisation data held by the Health and Social Care Information Centre, and mortality statistics held by the respective three national bodies (the Office for National Statistics, National Records of Scotland and Northern Ireland Statistics and Research Agency) should be centrally monitored to identify emerging patterns and trends. This should be the responsibility of PHE or the Department of Health.

The data should contain information on the circumstances surrounding the death, including individual characteristics, how the drug was obtained (i.e. to whom it was prescribed) and whether the case was one of suspected accidental ingestion by the child or of intentional administration by the parent(s). This data should be published biennially. The development of national standards for reporting child ingestions of OST medications and clarification on SCR thresholds is also warranted.

Further research into the circumstances by which adolescents (as opposed to very young children) come to ingest OST drugs is needed, in light of the evidence from mortality statistics. Research into how and why parents may be administering drugs to their children is also warranted.

Issue 4: A lack of awareness of the dangers of OST to children and professional competency

Original Recommendation: Training for drug services, pharmacies and GPs must highlight the dangers of OST medicines to children. Workers should also be able to address the intentional administration of OST medicines and other drugs to children with service users and take an active role in promoting positive parenting practices. Such developments dovetail with the ongoing focus on healthy scepticism and professional challenge. Other professionals working with vulnerable families, especially those undertaking home visits, also need to be alert and vigilant about the dangers of OST drugs.

New Recommendations: Home visits should be regularly conducted to ensure a whole-family approach, check on storage arrangements and identify the family's needs and other risk factors. The role of health visiting teams must be recognised by local partners, and health visitors should receive training and guidance on working with families where parental substance use is a factor. Routine notification procedures for professionals working with the family are conducive to effective information-sharing, early intervention and prevention. However, further research should be conducted to clarify issues of consent when sharing personal information.

Drug services and commissioners should ensure a 'child focus,' through its explicit inclusion in service level agreements and service specifications.

Issue 5: Despite clinical guidelines, safeguarding concerns are not sufficiently prioritised in reality

Original Recommendation: Guidance on the implementation of NICE, specifically Technology Appraisal 114, must reemphasise safeguarding children as a primary factor in making and reviewing decisions about OST, including which drug to prescribe and whether to permit take-home doses. This would be the responsibility of Public Health England or the Department of Health. There is also a role for the Secretary of State for Health in ensuring that NICE is implemented at the local level.

New Recommendation: Further research into the relative safety of buprenorphine and methadone in the context of child ingestions specifically is warranted. Clinical guidelines should also seek to clarify the circumstances under which both drugs will not be considered 'equally suitable', in light of evidence on the respective safety of methadone and buprenorphine.

Issue 6: We know that a single, isolated incident can be fatal. Safety measures should reflect this

Original Recommendation: Safe storage boxes should be provided to all treatment clients in receipt of OST, if they ever take any of their prescription home. There must also be consistent checks on storage arrangements, and information about the dangers of OST should be provided on an ongoing basis. Systems should be in place between different local agencies to distribute knowledge of, and responsibility for, monitoring and ensuring safe storage, including the sharing of safety plans agreed with the service user.

New Recommendation: Further research and clarification of guidelines on the use of naloxone in cases of child ingestions is warranted.

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Appendix I: Hospital admissions in England due to methadone poisoning, 2003-2014

| Year | Age (years) | | |
|----------|-------------|------|---------------|
| | 0-5 | 0-14 | 0-18 |
| 2003-04 | | 28 | |
| 2004-05 | | 24 | |
| 2005-06 | | 33 | |
| 2006-07 | | 38 | |
| 2007-08 | | 44 | |
| 2008-09 | | 27 | |
| 2009-10 | | 31 | |
| 2010-11 | | 33 | |
| 2011-12 | | 27 | |
| 2012-13* | 15 | | 25 (in total) |
| 2013-14* | 7 | | 18 (in total) |

*Coding was changed prior to the 2012-13 report, and provides a more detailed breakdown of age.

Source: HSCIC