

**Investigation into the circumstances surrounding the  
death of a man in March 2008  
at HMP Leeds**

**Report by the Prisons and Probation Ombudsman  
for England and Wales**

**June 2010**

This is the report into the death of the man found in his cell at HMP Leeds in March 2008 at 9.00am. He was unconscious, with no signs of life. Healthcare and prison staff attempted cardiac pulmonary resuscitation (CPR). Paramedics arrived and pronounced the man had died. He had been suffering from Maple Syrup Urine Disorder (MSUD), a serious rare genetic condition. He was 30 years old.

A post mortem was held at the request of Her Majesty's Coroner for West Yorkshire. It noted that the man's death was due to natural causes from Maple Syrup Urine Disorder. I extend my sincere condolences to his family and friends. I am very aware of the lateness of my report and thank the family for their patience. I hope that the report answers their questions.

On 28 May 2008, the Ombudsman's investigation into the man's death was suspended following information from West Yorkshire Constabulary. The police told my investigator that they would be carrying out an investigation into prescribed medication found in the man's cell. A police file was submitted to the Crown Prosecution Service (CPS) in 2009. The CPS judged that no action for any criminal proceedings would follow and on 26 February 2010, my colleague resumed her investigation.

I would like to thank the Governor at Leeds and his staff for their assistance in this investigation. I am indebted to a Detective Inspector (DI) and a Detective Constable (DC) of West Yorkshire Constabulary for working closely with the Ombudsman in this case.

As well as the clinical review was originally commissioned from Leeds Primary Care Trust (PCT), my investigator was given access to two specialist medical reports commissioned by West Yorkshire Constabulary. Those reports have been used as part of my investigation.

The man was suffering from a rare life threatening genetic disorder which resulted in his death five weeks into his prison sentence. Whilst no individual was to blame, a sad catalogue of errors contributed to his death which, I believe, could have been avoided. I make three recommendations to the Head of Healthcare in relation to dispensing medication, briefing healthcare staff and assessing prisoners returning to Leeds following a stay in hospital.

In response to the draft report the prison service have noted two minor inaccuracies which have been amended and paragraph 95 has been added to this final report. The three recommendations have been accepted. One of my family liaison officers tried to make contact with the man's family and left telephone messages. Up to the circulation of this report they have not returned those telephone calls or made contact with my office.

This version of my report, published on my website, has been amended to remove the names of the man who died and those of staff and prisoners involved in my investigation.

**Jane Webb**  
**Acting Prisons and Probation Ombudsman**

**June 2010**

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## SUMMARY

The man was convicted of sexual offences in February 2008 at Crown Court and sentenced to five years imprisonment. He arrived at Leeds prison later that day and a first reception health screen document noted that he said he had suffered from Maple Syrup Urine Disorder (MSUD) since childhood. (This is a serious and rare genetic urine disorder.) The measurements of his blood pressure, pulse and weight were all within the normal range. He also told the nurse that he had attempted self harm in 2004 and so an Assessment, Care in Custody and Teamwork (ACCT) plan, was opened. (An ACCT plan is a document that records observations, assessments and reviews on prisoners who may be suicidal or have thoughts of self harm.) He was moved to the induction unit in a shared cell.

The following day he was examined by the first prison doctor who saw the man. He told the doctor that he had been diagnosed with MSUD and the special diet and medication he would need whilst in prison. The doctor made a search on the electronic medical record system to identify medication for the man and prescribed a supplement of Maxamum XP. He asked the kitchen to order a vegetarian diet and wrote to the senior officer on the induction unit, informing him that the should not eat protein foods.

The man settled into the induction unit and his ACCT document was closed on 27 February. The first prison doctor who saw the man spoke to the man's consultant later that day to arrange weekly blood tests to check the man's amino acid levels.

The man was found to have breathing difficulties on 1 March and admitted to hospital for treatment and observation. He returned to Leeds on 11 March with his medication except his supplement. A second prison doctor signed a prescription for the man's medication which included Maxamum XP.

The following day, the first prison doctor spoke to the man's dietician. From that conversation the doctor was made aware that the wrong supplement had been prescribed and MUSD Maxamum was the correct one. The dietician also told the doctor that a vegetarian diet would be too high in protein and she would send diet sheets to manage the man's illness. The doctor amended the man's prescription and made a note on his medical record.

The first prison doctor went to the pharmacy department and informed them that Maxamum XP should not be dispensed to the man and it should be replaced by MUSD Maxamum. The pharmacy manager checked that there was no Maxamum XP in the pharmacy.

However, Maxamum XP had already been sent to a wing treatment room and a nurse dispensed it to the man on 13 March.

In March at 9.00am, the man did not respond to his cell mate who was unable to rouse him. The cell mate alerted officers who in turn radioed for urgent medical assistance. On the arrival of healthcare staff, the man showed no signs of life. Despite the presence of rigor mortis, healthcare and prison staff carried out cardio

pulmonary resuscitation (CPR) until the paramedics arrived at 9.21am. Following an examination, the paramedics confirmed the man's death.

Several weeks after the man's death, police photographs taken of his cell in March were recognised as showing two partially empty tins of Maxamum XP. The investigation into the man's death was suspended by the Ombudsman's office until the police enquiries were completed.

West Yorkshire Constabulary commissioned two expert medical reports into the man's death. One report was written by a consultant paediatrician with knowledge of MUSD, a second report by a forensic physician. Both reports have been used in this investigation. In January 2010, the Ombudsman's investigation was re-opened following completed enquiries by the police.

I make three recommendations for the attention of the Head of Healthcare in relation to dispensing medication, briefing nursing staff and assessment of prisoners' health following an inpatient hospital admission.

## THE INVESTIGATION PROCESS

1. My investigator visited Leeds on 3 April 2008. Notices and the Ombudsman terms of reference had been sent to the prison in advance of her visit. She met the Prison and Probation Compliance Officer and one of the prison's Family Liaison Officers. My investigator also spoke to the man's cell mate.
2. No members of the Independent Monitoring Board (IMB) or the Prison Officers Association asked to see my investigator. Leeds has previous experience of death in custody investigations. Furthermore, there was no response to the notices of investigation from staff or prisoners
3. One of the Ombudsman's family liaison officers, contacted with the man's foster mother informing her of our investigation. An appointment was made to see her. On 8 May 2008, my investigator and my family liaison officer visited the man's foster mother. She gave a history of her foster son's rare medical condition, the diet and medication he followed to control his illness. On 28 May, on receipt of information from West Yorkshire Constabulary the investigation was suspended.
4. My investigator met a Detective Inspector (DI) and a Detective Constable (DC) at Leeds police station on 12 September. The officers outlined the process of their investigation and it was agreed that no further interviews or investigation would be undertaken by my investigator until the police had completed their enquiries.
5. On 26 January 2010, my investigator met the DI again at a police station in Bradford. The DI informed my investigator that the police enquiry was complete. No further action for any criminal proceedings would be taken by the CPS. The DI gave my investigator two medical reports commissioned by West Yorkshire Police, and a summary of the police investigation, to assist with her report. The DI also gave my colleague contact details of one of the man's family members who the police had been liaising with.
6. Another of my family liaison officer contacted the newly identified family members to inform them that the Ombudsman's investigation was being re-opened. My investigator and the family liaison officer visited the family on 15 March 2010 and, after discussion, agreed to look at some additional issues. Their first concern related to a letter shown to the man's family by a police officer. They asked about an entry in his medical notes on 15 March, and lastly they wanted to know if the first prison doctor had replied to a letter from the man's solicitor, acknowledging his MSUD and the complexity of treating his condition.

## **The man**

7. The man was born in Manchester, he was 30 years old. He was raised by foster parents with his birth parents also live in the same area. He was a single man and, for the last four years lived alone, sometimes homeless until he was given a tenancy in council accommodation. At the time of his arrest he was unemployed.
8. The man had suffered from Maple Syrup Urine Disorder (MSUD) since birth. He had regular appointments with a dietician and received his medication from a hospital. However, it was noted in one of the expert medical reports that he did not always adhere to his diet and medication and regularly missed his hospital appointments.
9. In February 2008, the man was sentenced to five years imprisonment at Crown Court, for serious offences and received into Leeds prison. It was his first time in prison.

## HMP LEEDS

10. HMP Leeds is a category B local prison serving courts in West Yorkshire. (A local prison takes prisoners who have been remanded by the courts and those on short sentences.) The vulnerable prisoners' unit (VPU) is located on A wing. This wing is for those prisoners who request to be separated from other prisoners for their own safety.
11. There are 24 beds in the healthcare centre, with provision for those with both physical and mental health needs. Healthcare at Leeds is provided by the Leeds Primary Care Trust.
12. Leeds was last inspected by HM Chief Inspector of Prisons, in December 2007. HM Chief Inspector of Prisons found that Leeds had some significant problems and was underperforming in several key areas. However, there had been progress in all areas and managers were seeking to introduce further improvements.
13. Half of those prisoners surveyed by the Inspectorate felt that health services at Leeds were either good or very good. However, HM Chief Inspector of Prisons identified several areas for improvement. Among these, she felt that waiting times to see a prison doctor were too long. She also noted that not all healthcare staff had received resuscitation training in the last 12 months.
14. In their annual report for 2009, the prison's Independent Monitoring Board commented that the healthcare team had improved the service provided to prisoners over the course of the previous year. They reported that healthcare was a "well managed and forward thinking department".
15. Up to the time of the man's death, there have been 11 natural cause deaths at HMP Leeds since the Ombudsman took over responsibility for investigating deaths in custody. The man's death was the first death in the prison as a result of this rare genetic condition and the first that the Ombudsman has investigated.

## **GLOSSARY**

### **Maple Syrup Urine Disorder**

16. The MSUD family support group describes Maple Syrup Urine Disease (MSUD) as a disorder in the body's ability to use three of the essential amino acids in protein. These three essential amino acids (leucine, isoleucine and valine) are often called the branched-chain amino acids (BCAAs). Protein in the body is made up of 20 amino acids, 11 are essential and nine are nonessential. The essential amino acids must be supplied in the daily diet. The nonessential amino acids can be obtained from the diet or produced in the body from other amino acids. In MSUD, the enzymes necessary to break down leucine, isoleucine and valine are either absent, inactive or only partially active. Because of the enzyme deficiency in MSUD, the BCAAs and their by products, called ketoacids, become elevated. It is these elevations that cause an infant or child with MSUD to display symptoms of the disease. MSUD is a serious disorder with life-threatening consequences unless it is addressed promptly. However, MSUD is manageable, just as diabetes is manageable. Careful monitoring and adherence to dietary restrictions are essential. Even minor illnesses and infections must be taken seriously and require special care. Treatment for MSUD has improved greatly over the past few years.

17. The medical report from the consultant paediatrician, states that a food supplement used to treat Maple Syrup Urine Disorder is MUSD Maxamum, to be taken with other special low protein foods, vitamins and minerals. A similar metabolic disorder is phenylketonuria (PKU). There is a similar dietary approach to that of MSUD, and food supplement of Maximum XP is prescribed. However, a person with MSUD who takes Maximum XP would expect their circulation to fail and suffer brain toxicity as a result of taking the incorrect supplement.

### **The Bolam Test**

18. In cases of alleged negligence involving medical treatment, the Bolam test is used to determine the standard of care owed to a patient by doctors. The case *Bolam v Friern Hospital Management Committee* (1957) 1 WLR 583 established that there can be no breach in the duty of care so long as the doctor acted in accordance with a responsible body of medical opinion. Subsequent cases have challenged this test, requiring the doctor to behave 'reasonably' or 'logically' regardless of the body of medical opinion.

## KEY FINDINGS

19. The man was arrested in February 2008 at a hospital following his discharge from an inpatient stay. The warrant stated that he had failed to appear at court. During his stay in hospital, the diagnosis of Maple Syrup Urine Disorder (MSUD) was confirmed. The hospital had contacted medical staff at another hospital to confirm his medical history and treatments. He was in possession of his supplement MUSD Maxamum which was recorded on his hospital discharge form.
20. On arrival at a police station, he was examined by a police doctor who noted that he had in his possession MUSD Maxamum. He was given this supplement whilst in police custody waiting for his court appearance.
21. A consultant, at the man's local hospital wrote to the man's solicitors after hearing that he was in custody, to inform the police and prison services of the man's complex medical condition, the medication and diet he would need to stabilise his condition. The man had been prescribed MSUD Maximum, (a supplementary powder for nutrition) that was an essential part of the man's medication to control his illness.
22. The next day, the man arrived at Leeds prison following his conviction at Crown Court. A first reception health screen document was completed. The document noted that he suffered from MSUD he was under weight and had attempted to harm himself in 2004. His blood pressure and pulse rate were noted and within the normal range. He had a tin of MUSD Maxamum with him, which was noted on the first reception health screen document. (It is not recorded whether the man took this tin of MSUD Maxamum into the prison.)
23. An Assessment, Care in Custody and Teamwork (ACCT) plan was opened. (An ACCT plan is a document that records observations, assessments and reviews on prisoners who may be suicidal or have thoughts of self harm.) It was recorded in the ACCT that the man attempted suicide with an overdose in 2004, although he was vague about this incident and date. An assessment noted that he still had thoughts about harming himself. The man was placed in the first night centre, in a double cell and to be checked hourly by staff.
24. At 4.25pm the following day, the man saw the first prison doctor. The doctor noted the man's medical condition of MSUD, the details of his dietician and doctor at a hospital. The doctor had little previous knowledge of MSUD and searched the internet service provided by EMIS. (EMIS is the clinical software used by healthcare services that record patient details, medical notes and offers medical information.) Following a search, the doctor prescribed a dietary supplement of Maxamum XP . (This supplement is not the correct medication for MUSD and is contradictory in treatment for MSUD.)

25. The prison doctor added to the man's medical notes that his foster mother may be able to assist with information about his medication and her telephone number was added to the notes. The pharmacy did not have Maxamum XP in stock and ordered the supplement from their supplier. Although the man had MUSD Maxamum in his possession when he arrived at Leeds, it is not known if he told the doctor which supplement was appropriate for his illness.
26. The first prison doctor wrote a memo to the senior officer on D wing (induction wing) where the man was located. The memo noted that the man was suffering from MSUD and would become unwell if he ate foods containing Protein. The doctor said a vegetarian diet would be sufficient for the man who had been prescribed a supplement to take daily. The doctor asked the senior officer to ensure steps should be taken to avoid any meat products being included in the man's diet.
27. On 26 February, it was recorded that the man complained twice to healthcare staff, saying he had not had his medication and was feeling tired.
28. The following day, the first prison doctor spoke to the consultant at a hospital by telephone and he suggested to the prison doctor that the man should have weekly blood tests to check his amino acid concentration. This could be arranged through a hospital and the consultant at the hospital would confirm this later. The man's ACCT plan was closed following a review meeting with staff and the man. He said he had no thoughts of self harm and was getting used to prison life. However it had been noted that he had seemed to be disoriented, vague and "spaced out".
29. The man's solicitor faxed a letter to the first prison doctor outlining his medical condition on 28 February. The doctor replied to the solicitors saying that he was aware of the man's illness and all necessary steps to support him had been taken. No reference was made in this letter as to what medication the man was receiving. (The letter written by the prison doctor was dated 4 March.)
30. On 1 March at 11.30am, healthcare staff were called on the radio to a code blue alert, (the prison's term for a medical emergency involving breathing difficulties) to see the man in his cell. He was sweating profusely and having difficulty in breathing. The man's mattress was pulled onto the cell floor and he was placed on the mattress in the recovery position. An ambulance was called and oxygen was administered. The man's breathing was better by the time the paramedics arrived.
31. The paramedics advised that the man should be taken to the healthcare unit until the doctor arrived. At 12.30pm, the doctor saw the man and an ambulance was called to take him to hospital. The man was escorted by two officers and was restrained. (An escort chain is a 1.8 metre length of chain with one cuff attached to the prisoner and the other cuff attached to an officer.) At 8.35pm, the man was returning from having an x-ray in the

hospital when he attempted to get off the trolley bed and had to be placed back on it. He was then admitted to a ward.

32. The following day, the man was placed on an intravenous drip and given insulin. He was escorted by two officers during his stay at the hospital. The man was discharged from hospital at 4.30pm on 10 March and he returned to Leeds. He was located on D wing, as A wing was full. On discharge the man was given medication by the hospital of an antibiotic, thiamine, Polycal and Calogen but not MSUD Maximum. There is nothing recorded that healthcare staff had been made aware that the man had returned to the prison.
33. On 11 March, the man saw the second prison doctor who noted that he was receiving a course of anti-biotic medication prescribed by the hospital. The doctor reviewed the man's medication and wrote a new prescription for all his medication including the previously prescribed Maxamum XP.
34. The following day, a dietician from the hospital spoke to the first prison doctor by telephone. She advised the doctor that the man would need MSUD Maximum as well as other dietary supplements. The dietician from the hospital told the doctor that a vegetarian diet would contain too much protein for the man. The dietician said that XP Maxamum should be stopped as it was the incorrect supplement for MSUD . It was noted that the first prison doctor told the dietician that MSUD Maxamum would now be ordered for the man.
35. The doctor noted the man's low protein diet and weekly checks should be made of his amino acid levels by blood tests. His medication was reviewed and a new prescription completed.
36. Having spoken to the dietician at the hospital, the first prison doctor contacted the pharmacy department and told them that the wrong dietary supplement had been previously prescribed. The doctor made an entry on the man's medical notes to that effect. He should not be dispensed XP Maxamum and the prescription was altered to MSUD Maxamum.
37. The pharmacy manager recalled the conversation with the first prison doctor. She told a member of the pharmacy staff to cancel the orders for XP Maxamum and instructed that any which had arrived should be returned to the supplier. However, a supply of XP Maxamum had already been sent to the wing medication room. (Furthermore it had been confused with a prescription for another prisoner whose name was similar of the man's but fortunately this medication had not been dispensed.)
38. On 13 March at 9.40am, a nurse gave the two tins of XP Maxamum from the wing medication room, as prescribed by the first prison doctor on the man's reception into Leeds on 23 February and the second prison doctor on 10 March. The man took the medication back to his cell. He had made a complaint that day that he was not receiving his medication. (The complaint was received by the complaints clerk on 17 March two days after his death.)

39. The man's medical notes record that his dietary information was passed to the prison's kitchen on 14 March. He also told the nurse who had given him two tins of EP Maxamum when he went to collect his antibiotic medication, "his special drink" (thought to be XP Maxamum which had been dispensed to him by the nurse the previous day) was the wrong flavour and made him feel sick. The man's medical notes do not indicate that he had yet received MSUD Maxamum, as prescribed the previous day by the first prison doctor. At about 6.30pm that day, the man moved from D wing to A wing where he shared a cell with another prisoner.
40. The cell mate who shared the cell with the man went onto the landing for association time whilst the man stayed in his cell. On return to his cell, the cell mate saw the man asleep on the bottom bunk bed. About 8.15pm, the man woke up and told the cell mate that his hands were hurting. He also told him he had been in hospital and had drips in his hands. Both men then watched television, with the cell mate falling asleep at around 10.00pm. Shortly after midnight, the cell mate switched off the television and cell light then went back to sleep. The cell mate saw that the man was asleep. In the early hours of the next day, the cell mate heard the man groaning in his sleep, but could also hear him breathing so he went back to sleep.
41. At about 9.00am, the cell mate was woken by an officer asking if he wanted to go out for exercise. The cell mate looked at the man and saw he was not moving. He rang his cell bell and called for an officer. An officer responded to the cell bell and, on entering the cell, saw that the man was lying face down on the bed. The cell mate was told to wait outside the cell. A second officer then joined the first officer who had responded to the bell in the cell. The officers spoke to the man, but there was no response and no signs of life.
42. The second officer and the first officer moved the man onto his back on the floor. The second officer then put out a code blue call on his radio (a code blue indicates a medical emergency where someone is not breathing), and asked another officer to get the nurse from the A wing treatment room. The first staff nurse on the scene joined the officers in the man's cell observed he was showing no signs of life. The first staff nurse on the scene requested radio assistance and an emergency ambulance was requested. The second officer began cardio pulmonary resuscitation (CPR), whilst the first staff nurse on the scene tried to make an airway for oxygen to be administered. Due to rigor mortis, the nurse was unable to place an oral airway into the man's mouth.
43. About two minutes later, the first staff nurse on the scene and the second officer were joined by three other nurses who brought resuscitation equipment with them. A defibrillator (a machine that sends shock waves to re-start the heart) was attached to the man's chest. The defibrillator advised not to shock so the first staff nurse and the second officer continued with CPR.

44. At 9.21am, the paramedics arrived at Leeds and went straight to the man's cell. He was examined by the paramedics and pronounced dead a few minutes later.
45. A retrospective entry was made on 15 March in the man's medical notes by the nurse who had given him two tins of XP Maxamum saying:
- “Inmate complaining that the specialist drinks [the supplement] supplied are not the right flavour and making him feel nauseous and has vomited once. Advised to let nurse know if vomiting continues.”
46. At about 3.00pm that afternoon, a Governor and Healthcare Officer went to the home of the man's foster mother to tell her of his death. On arrival the prison staff were unable to find her at home. Through neighbours they traced a relative living in the same road, who told them that the man's foster mother was away for the day. The staff were then given an address where his blood parents lived. They went to the address and were able to tell the man's parents of their son's death. Later that day they spoke to the man's foster mother.
47. The Healthcare officer and the Governor paid their respects, and that of Governor at Leeds, at the man's funeral on 20 March. The prison offered financial assistance towards funeral expenses.
48. Several weeks following the man's death the police liaison officer based at the prison, reviewed photographs taken by the police of the man's cell on the day of his death. The DC saw two tins of opened Maxamum XP on a table beside the man's bed. The police officer knew from information held in the man's medical notes that he should not have been issued with this medication and so he informed the DI of his observations.

## **ISSUES**

### **Clinical care**

49. West Yorkshire Constabulary commissioned two expert medical reports into the man's medical care whilst he was in custody at Leeds. The first report by the consultant paediatrician with specialist knowledge of MSUD and a second report by a forensic physician.
50. For the purpose of this investigation the consultant paediatrician's report has been used to underpin the issues surrounding the man's death. The report by the forensic physician offers an expert opinion as to whether the man's death was avoidable and comments on the actions of individual members of staff.
51. The consultant paediatrician viewed the man's medical notes, statements from prison healthcare staff, prison staff, a prisoner and hospital staff. He made a list of the events leading up to the man's death and commented on the issues raised from that chronology. The consultant paediatrician reviewed and gave an expert opinion on MSUD. He further commented on the effects of the illness and the man's treatment in Leeds. The forensic, was also given documents as viewed by the consultant paediatrician.

### ***Background information***

52. The man was diagnosed with MSUD at eight years old and remained in hospital for some months whilst his illness was managed. He grew up with foster parents and had little contact with his blood parents. He was under the care of a local hospital with consultants, an outreach nurse and a dietician. The consultant paediatrician commented that the man's social life was problematic and he had been known to have periods of homelessness.
53. From March 2005 to June 2006, five high levels of amino acids were noted in his blood indicating that he had a poor diet. If the levels rise too high, the brain becomes cloudy and, if the situation is not corrected, it becomes terminal. In 2008 the man's consultant at the hospital wrote to his doctor that the man was not attending his out patient appointments but contact would continue through the specialist clinical nurse and dietician.

### ***MSUD control prior to February 2008***

54. It was known from the hospital records, that the man had not been consistent about eating a low protein diet, however he was apparently taking the MSUD Maxamum supplement. He would have little in reserve, so any small change in his circumstances might easily have serious consequences. Consultant paediatrician commented:

"It seems to me that he was just getting by without decompensation episodes but it is likely that his brain function including cognitive ability

would be slowly deteriorating. It is likely that his level of control would render him vulnerable to a decompensation episode.”

55. Decompensation is the functional deterioration of a previously working structure or system. Decompensation may occur due to fatigue, stress, illness, or old age. When a system is "compensated", it is able to function despite stressors or defects. Decompensation describes an inability to compensate for these deficiencies. It is a general term commonly used in medicine to describe a variety of situations. Decompensation would be the result of failing to take MSUD Maxamum or not adhering to a low protein diet by eating more protein than usual.

### ***Prescribing and issuing protein supplements***

56. The first prison doctor who saw the man prescribed Maxamum XP on 22 February, after an internet search via EMIS for a supplement to the man's diet. It is now known that this was not the correct treatment for MSUD. The doctor, quite reasonably, relied on the information held within the EMIS system which indicated that Maxamum XP should be taken as a supplement. MSUD Maxamum did not appear as an alternative medication and he prescribed Maxamum XP.

57. It is unknown what happened to the tin of MUSD Maxamum that the man brought into Leeds on his reception. It is unusual for prisoners to retain any, medication which they bring in with them.

58. The forensic physician made enquiries with Egton Medical Information Systems (EMIS) in Leeds, who installed the electronic medical record system at the prison. He noted there was a lack of information on this system and the incorrect information contributed to the wrong supplement of Maxamum XP being prescribed. I understand that as a result of the man's death, prescription advice to doctors in relation to MSUD has now been amended on EMIS.

59. Following a discussion with the dietician at the hospital on 12 March, the first prison doctor amended the prescription from Maxamum XP to MSUD Maxamum. He then went to the pharmacy and told staff to cancel the Maxamum XP. Pharmacy Manager, the pharmacy manager recalled their conversation and, in turn, told her staff to return any Maxamum XP to the suppliers. The forensic noted that the pharmacy manager said in her statement to the police that pharmacy staff would only consult the electronic medical record system (EMIS) if there was a particular query with a prescription.

60. At this stage there is nothing noted in the man's medical records as to what supplement he had taken, if any, unless he had been supplied with MSUD Maxamum by the hospital.

61. On 13 March, the nurse who had issued the man with two tins of Maxamum XP from the wing treatment room that were sent out from the pharmacy on 28 February. The following day he told nurse that his “special drink” was the wrong flavour and made him feel sick. It is assumed the man was referring to the supplement of Maxamum XP which he had given the previous day.
62. The forensic physician noted that the nurse should have checked the man’s prescription via EMIS before she gave Maxamum XP. The nurse should also have been made aware that the man had recently returned from hospital, of his condition and the need for him to have the correct diet and protein supplement. All this information should have been made available for the nurse.

**The healthcare manager should ensure that all healthcare staff are fully brief at the start of duty with updated information on prisoners with complex medical conditions and any prisoners discharged from hospital.**

**The pharmacy department should review all prescribed medications when a prisoner is returned from hospital and any previous prescribed medication should be returned to the pharmacy to be part of that review.**

### ***Diet whilst in prison***

63. The man spent two periods in Leeds, his reception on 23 February to 1 March, and then 10 March until his death on 15 March. It was noted that a vegetarian diet was ordered for the man, which was not necessarily low in protein. However, when the first prison doctor discussed this diet with the consultant at the hospital, he did not raise this as an issue.
64. The forensic physician commented;
- “The first prison doctor needed to ensure that an appropriate diet and medication was available - he appears to have tried to do this and has communicated and documented these communications in the medical records.”
65. Vegetarian diets are high in natural protein and therefore inappropriate for people with MSUD. If the man took this diet combined with his vulnerable physical condition on reception into Leeds, then it could lead to signs of decompensation, lethargy, drowsiness, unsteadiness, slurring of speech, fits and death. The dietician at the hospital told the doctor that a vegetarian diet was unsuitable. She faxed a diet sheet to the doctor, making it clear that MSUD Maxamum was required as well as a specialised diet. It is not known whether any changes were made to the man’s diet following that advice. However the doctor did inform the kitchen of the change to the man’s diet on 14 March.

66. There is no information that the man was eating his diet or refusing it. The DC interviewed the man's cell mate, who told him that the man had complained that he was not given his proper diet or medication. However, it is known that this complaint was not received by the complaints clerk until 17 March.

67. The process for complaints is regulated by the complaints clerk. The complaint is checked and then progressed, to a given timescale, for a response by the appropriate person to whom it was made. In this case, the man's complaint was about his medication and diet and it would be forwarded to the healthcare manager. (The man's complaint was received by the complaints clerk on Friday and forwarded to healthcare the following Monday.)

68. The forensic physician commented:

“ In my opinion a complaint regarding medical or health issues should be reviewed at the earliest opportunity by a doctor.”

Taking into account the number of complaints made every day by prisoners, for a variety of issues, the complaint would take some time to reach the appropriate person. I empathise with the forensics' recommendation that doctors should review all complaints at the earliest opportunity. However, in a prison the size of Leeds, this would not be practical. However I draw the issue to the attention of the healthcare manager to consider whether complaints about medication should be reviewed by a doctor.

69. Likewise there is also no information that the man had been taking his prescribed supplement of Maximum XP, prescribed by the doctor from 23 February to 1 March. However, it was noted by the DC, in statement, that two partially empty tins of Maximum XP were photographed on a bedside table in the man's cell following his death. The tins had a prison pharmacy label with his name on.

70. The consultant paediatrician said:

“If no (appropriate) protein substitute were made available, or if the man was not eating supplied diet well - he may not have wanted to or knew that it was high in protein and refused for that reason - he would be in a position where his body protein would tend to break down and put him at significant risk of decompensation. Low protein foods like prescribable biscuits should have available for him and their provision was stressed by the dietician at the hospital in her telephone(s) to the doctor. There is no evidence that they were prescribed.”

71. The man was supplied with the wrong protein substitute in Leeds and was supplied with Maxamum XP instead of MSUD Maxamum. The dietician at the hospital apparently made the doctor aware of the error. However it would seem that the man was still not given MSUD Maxamum, and two tins

of Maxamum XP were found to be in his cell after he died. No MSUD Maxamum was found in his cell or the treatment room.

72. The consultant paediatrician said:

“The relatively high dietary protein load of a vegetarian diet for some days together with supplementary enhanced protein containing branched chain amino acids that the man was almost certainly exposed to through being given the wrong protein substitute Maxamum XP instead of MSUD Maxamum. This would represent a different situation for him that pertaining in his periods looking after himself prior to going into prison.”

### ***Admission to hospital***

73. The man was admitted to hospital on 1 March 2008. This was a decompensation episode, most likely linked to poor dietary control before he came into prison on 23 February. From then until he went into hospital, he is likely to have had an inappropriate vegetarian diet and, or, an inappropriate protein supplement of Maxamum XP.

74. The consultant paediatrician said:

“In hospital, high leucine concentrations in blood were evident and would be similar at discharge on 10 March 2008 though a little lower at that stage and in association with generally better (normal for the man) clinical position. However, this would not be a strong platform from which to react to a return to a high intake of branched amino acids through diet (vegetarian) and wrong supplement provision. If he were either not eating the usual amount of food, eating too much protein and/or having Maxamum XP, it would not be surprising if he were to fairly rapidly (over days) return to a state of decompensation within which death would always be a possibility.”

### ***Return from hospital to prison***

75. On his discharge from hospital on 10 March, the man was taken to D wing. Healthcare staff were not aware that he had been discharged from hospital and returned to Leeds. The man had been an inpatient for ten days, being treated for a rare and serious condition. I believe that his ongoing healthcare should have been a priority and the man should have been assessed by healthcare staff as soon as he returned. Admission to the healthcare unit should have been considered as it would have given staff an opportunity to monitor his health in an appropriate setting. This was especially important taking into account the serious and unusual nature of his illness.

**A member of the healthcare staff should assess all prisoners returning to the prison following an inpatient stay in hospital.**

76. A discharge note is recorded in the man's clinical notes detailing his medication however, this is not dated. Furthermore a discharge summary from hospital was not received into the healthcare until 23 March. The date of the discharge letter was 17 March, two days after the man's death.

### ***Likely contributors to the man's death***

77. The man struggled to keep to his diet and medication whilst he was living in the community although it was thought that he took his MSUD Maxamum supplements. The prison doctors, perhaps not surprisingly, lacked knowledge of his rare condition as, to a lesser extent, did the pharmacists. However, it is not possible for doctors and pharmacists to know about all medical conditions, particularly rare ones. Nevertheless, doctors have a duty of care to ensure appropriate management of medical conditions through advice and research. Some medical diets are critically important, this being so in the man's case. Furthermore, it is the responsibility of the prescriber to indicate to the dispenser how important it is to provide medication within a period of time.

78. An appropriate diet and supplements should have been readily available, the man did not receive a protein substitute supplement or was given the incorrect one, when he was in Leeds from 23 February to 1 March and likewise from 10 March until his death.

79. It was assumed by hospital staff on 10 March that MSUD Maxamum would be available in Leeds when he was discharged. All other medications were given to him at this time with the exception of MSUD Maxamum.

80. There was clearly an error by the first prison doctor and the second prison doctor in prescribing Maxamum XP instead of MUSD Maxamum. Whilst the first prison doctor had written up the medication, the second prison doctor signed the prescription on 10 March.

81. The consultant paediatrician commented that neither doctor's action was negligent and said:

"The Bolam Test of clinical negligence is used as a test of actions by doctors compared to what a reasonable and responsible body of other doctors of similar grade and responsibility would do in similar circumstances. It should not be used as a test in prescription writing as although a reasonable and responsible body of doctors would not make the same error in the same circumstances (Bolam test positive), most members of that body would have been responsible individually at another time for a similar written prescription error. It is an indictment of the medical profession that such errors occur relatively frequently."

82. The forensic was noted to have agreed with the consultant paediatrician's conclusion in regard of prescription errors.

83. Taking into account all the issues surrounding the man's death, the factors of his poor health and his non compliance to his diet prior to his reception into Leeds, the consultant paediatrician said:

"It is likely that most or all of these factors contributed to his [the man's] death but I cannot 'weight' them accordingly to relative size of their contribution."

84. The forensic physician summed up his report by addressing several points. I have considered those relevant to my investigation which concern the man's diet and medical care whilst he was in prison.

- The man was given two tins of Maxamum XP of which approximately three quarters of one tin was empty, 48 hours before he died. Would he still have died if he had not been given any?

The forensic physician said:

"I do not believe it is possible to say – I note that the man also appears to have been given Maxamum XP for some of his in patient stay in hospital, from which it appears he was discharged earlier than wanted by the consultant at the man's local hospital – I am still not quite clear why he had to be discharged on 10 March 2008."

- Was there inadequate record keeping by a number of staff members? Can individual failings be pinpointed?

The forensic physician said:

"I cannot identify individual failings as the sequence of events and accounts and recall is so complex."

- Was the content of the first prison doctor's memo to the kitchen about the man's diet sufficient bearing in mind the consultant at the hospital's advice that his diet should be based on a vegetarian diet rather than the doctor's instruction that a vegetarian diet should suffice?

The forensic physician said:

"I believe that many doctors would have sent a memo using the terms described by the first prison doctor ... I am not sure that the consultant at the hospital's advice provided enough detail of clarification."

85. In conclusion the forensic physician said:

"I cannot identify a single point of failure. There appears to be a number of communication failures of misinterpretations, of perhaps sub-optimal treatment in hospital and prison all of which may have contributed. I am unclear as to how compliant the man was with his regimen which itself,

either in or out of prison or hospital may have had the potential for contributing to his death.”

### **Additional family issues**

86. The man’s family raised three additional points for my colleague’s attention. The first concerns a letter shown to the family by a police officer shortly after the man’s death. The officer had told the family that the man wrote this letter. My investigator did not see a letter in the man’s file written by him. My family liaison officer, has advised the man’s family to take this matter up with the police.
87. The nurse who had given the man two tins of XP Maxamum made a retrospective entry in the man’s medical notes on 15 March. I am unable to clarify two years after the man died as to why this was a late entry by the nurse. It is not uncommon for medical notes to be made retrospectively. However, I draw this matter to the attention of the head of healthcare to remind staff that entries should be made in the medical notes as soon as practicable.
88. The last point raised by the man’s family wished to raise was whether the prison doctor was told of his illnesses by his solicitor. I can confirm that a letter was sent by the solicitors to the healthcare unit at Leeds outlining his illness. The first prison doctor replied to the solicitors on 4 March 2008, saying that the man’s illness was known to healthcare staff and he was being treated.

## CONCLUSION

89. As a child, the man was diagnosed with the rare condition, Maple Syrup Urine Disorder. It was generally kept under control, although it was known that he did not always conform to his strict diet and did not keep out patient appointments with his consultant. However, he was in contact with his dietician and I assume that he took his supplement of MSUD Maxamum regularly.
90. On the man's arrival at Leeds he was prescribed an incorrect supplement of Maxamum XP and the kitchen was notified to provide him with a vegetarian diet. However, before he was given his supplement he was admitted to hospital as a result of MSUD symptoms and treated.
91. The man was discharged back to Leeds, and was dispensed with the incorrect supplement of Maxamum XP despite it being withdrawn by the first prison doctor when he was told of the prescribing error. The man died 48 hours after being dispensed Maxamum XP and it was noted that the tins were partially empty.
92. Both medical experts agree that there were mistakes in the man's treatment. However, they conclude that no individual was solely at fault. A catalogue of events led to his death.
93. It is tragic that the man died as a result of his rare medical condition. There was little knowledge about the condition and the arrangements to support patients with MSUD were deficient, including the EMIS database which indicated the incorrect supplement to be prescribed.
94. EMIS has been amended to provide the correct information about the treatment of MSUD. Nevertheless, healthcare staff should have ensured that the man received the correct supplement particularly after he was discharged from hospital. He should have been assessed by healthcare staff and pharmacy checks should have made certain that the man was receiving the correct prescription. Previous prescribed medication should have been checked against EMIS before the man was dispensed with any further medication.

## **Response to draft report**

95. In response to the draft report the following comment was made by the prison service:

“The first prison doctor states that he did not see the man at 12:30. He was arriving to do reception and was told he had been unwell. Nurses were planning to cancel the ambulance. Recognising the potential serious nature of the condition, he requested that the man was sent out by ambulance urgently (he believes it was a nurse he spoke to).”

## RECOMMENDATIONS

### For the Head of Healthcare

1. The healthcare manager should ensure that all healthcare staff are fully brief at the start of duty with updated information on prisoners with complex medical conditions and any prisoners discharged from hospital.

**Accepted** – “All complex health issues will be flagged up as an alert on System one by Doctor on reception. All staff having any interaction with patients refer to patient records for patient information and to record patient interaction. All staff having contact with patient therefore have access to the alert on system one and the medical history of the patient.

The patient will be referred by the reception GP to citywide/chronic disease team using the system one TASK function. The team will co-ordinate care planning and summarise notes and care including details of the complex medical condition on system one within one working day of patient’s reception into HMP Leeds.”

2. The pharmacy department should review all prescribed medications when a prisoner is returned from hospital and any previous prescribed medication should be returned to the pharmacy to be part of that review.

**Accepted** – “New Patients: Risk assessment documentation has been developed to include a section for current medication. Medication brought in by patients is now collected by admin receptionist, logged by doctor, using patient’s own meds (POM) pathway. This pathway is in all clinical reception rooms and laminated copy in reception. Those medications appropriate to re-issue will go to the wing treatment room for administration. Appropriate meds will be given back in possession i.e. inhalers, drink supplements.

Patient returning from hospital (in-hours): All patients returning from hospital with a prescription will have all their current medications removed from the patient’s cell and the treatment rooms by Hotel 3. Hotel 3 will take the interim discharge papers to the duty doctor who will check, review and re-prescribe all medications and ensure appropriate follow-up (eg blood tests etc). All removed medication will be returned to pharmacy by Hotel 3.

Out of hours with no GP cover, a full review will be undertaken to establish a safe mechanism for managing patients who return from hospital out of hours. Working Group to include GP, Pharmacy Manager, Nurse, prison security (sierra 1).”

Audit compliance with recommendation

3. A member of the healthcare staff should assess all prisoners returning to the prison following an inpatient stay in hospital.

**Accepted** - "Escorting Officers returning patients from un-planned hospital episode contact Hotel Three (healthcare patrol nurse) who ensure a nurse visits the patient within 1 hour of being informed of return to:

- a. review the hospital discharge papers,
- b. arrange appropriate monitoring and follow-up
- c. flag-up to duty doctor through the System one TASK function that the patient has returned
- d. Take discharge papers to healthcare admin department to scan onto medical notes.
- e. Assessing nurse record interaction and outcomes on system one in a timely manner.

Escorting Officer Standard Operating Procedures will be reviewed jointly with prison and healthcare to ensure their Standard Operating procedure describes the mechanism to contact Hotel Three

Standard Operating Procedure for Hotel Three will be reviewed to include the duties expected as detailed in rec 3., 1a-e above.

Audit compliance of actions against recommendation"