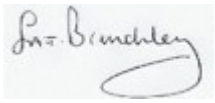
	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS **THIS REPORT IS BEING SENT TO:** THE CHIEF EXECUTIVE, NHS ENGLAND
1	**CORONER** I am Simon Brenchley Assistant Coroner for Birmingham and Solihull
2	**CORONER'S LEGAL POWERS** I make this report under paragraph 7, Schedule 5, of the Coroners and Justice Act 2009 and regulations 28 and 29 of the Coroners (Investigations) Regulations 2013.
3	**INVESTIGATION and INQUEST** On 13 March 2023 I commenced an investigation into the death of Graham Thomas John SMITH. The investigation concluded at the end of the inquest on 24th August 2023. The conclusion of the inquest was; Died from natural causes likely contributed to by a combination of the delay in him being prescribed his normal medication for the condition Myasthenia Gravis from which he suffered as well as him being prescribed on admission a dose of an antibiotic medication for sepsis that was contraindicated in his case. The medical cause of his death was: 1(a) Respiratory Failure. Chest Infection 1(b) Myasthenia Gravis II Biliary Sepsis. Type 2 Diabetes
4	**CIRCUMSTANCES OF THE DEATH** Graham Smith suffered from Myasthenia Gravis, a rare long-term condition that causes muscle weakness and for which he was prescribed Pyridostigmine by his GP. On 1st March 2023 he was admitted to the Emergency Department of the Queen Elizabeth Hospital in Birmingham with suspected biliary sepsis/ascending cholangitis due to an obstructing bile gall stone as well as a bilateral basal consolidation which was revealed by a chest x ray. Whilst in the ED, he was initially prescribed Tazocin for treatment of the sepsis but was then given a dose of Gentamicin which is in fact contraindicated in patients suffering from Myasthenia Gravis. He was not prescribed his normal Pyridostigmine. On 2nd March he was transferred to a Liver ward for further treatment and arrangements were made for him to undergo an Endoscopic Retrograde Cholangiopancreatography Procedure ('ERCP') which could not be done until 3rd March.

	In the early hours of 3rd March he deteriorated suddenly and was seen by the Critical Care Outreach Team who noted that he had not been prescribed his normal medication since admission and that he had received a dose of the Gentamicin. He was found to be suffering from a myasthenic crisis causing respiratory failure. He was restarted on the Pyridostigmine and treatment and management of his sepsis continued on ICU. Following a successful ERCP procedure later on 3rd March, his inflammatory markers were improving and his cholangitis was noted to be resolving over the next few days. However, he continued to have multi organ dysfunction with increasing respiratory failure and following a further significant deterioration passed away on 7th March.
5	**CORONER'S CONCERNS** During the course of the inquest the evidence revealed matters giving rise to concern. In my opinion there is a risk that future deaths will occur unless action is taken. In the circumstances it is my statutory duty to report to you. The **MATTERS OF CONCERN** are as follows. - 1. During the course of the inquest I heard evidence from the author of a Serious Investigation Report commissioned by the Trust (University Hospitals Birmingham) that the errors with regard to medication were, in part, due to a lack of awareness on the part of clinicians within the Trust as to the seriousness of Myasthenia Gravis as well as the interaction between Gentamicin and this condition. 2. I also heard evidence from the author of the SI report about a comprehensive action plan that is being put in place to raise awareness within the Trust including the development and issue of a Trust wide patient safety notice in relation to Antibiotic Prescribing in patients with Myasthenia Gravis. 3. However, given the apparent lack of awareness about Myasthenia Gravis amongst clinicians within UHB, a large hospital trust in a significant metropolitan area, I am concerned that there is a risk that a similar lack of awareness could persist amongst clinicians in other areas of the country and that consideration should be given to raising awareness more widely.
6	**ACTION SHOULD BE TAKEN** In my opinion action should be taken to prevent future deaths and I believe you have the power to take such action.
7	**YOUR RESPONSE** You are under a duty to respond to this report within 56 days of the date of this report, namely by 3 November 2023. I, the coroner, may extend the period. Your response must contain details of action taken or proposed to be taken, setting out the timetable for action. Otherwise you must explain why no action is proposed.
8	**COPIES and PUBLICATION**

	I have sent a copy of my report to the Chief Coroner and to the following Interested Persons: • [redacted] Family • University Hospitals Birmingham NHS Foundation Trust I am also under a duty to send the Chief Coroner a copy of your response. The Chief Coroner may publish either or both in a complete or redacted or summary form. He may send a copy of this report to any person who he believes may find it useful or of interest. You may make representations to me, the coroner, at the time of your response, about the release or the publication of your response by the Chief Coroner.
9	**7 September 2023** Signature:  **Simon Brenchley** **Assistant Coroner for Birmingham and Solihull**