	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS **THIS REPORT IS BEING SENT TO:** IPs: Alex's family DHU 111 (East Midlands) CIC Sherwood Forest Hospitals NHS Foundation Trust CQC For Action By: NHS Pathways The Roundwood Medical Practice, Mansfield, Nottinghamshire NHS England NICE For information only to: Chief Coroner Department for Health NSCB Mansfield and Ashfield CCG
1	**CORONER** I am Laurinda Bower, HM Assistant Coroner for **Nottingham City and Nottinghamshire**
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. http://www.legislation.gov.uk/ukpga/2009/25/schedule/5/paragraph/7 http://www.legislation.gov.uk/uksi/2013/1629/part/7/made
3	**INVESTIGATION and INQUEST** On 27 August 2018, I commenced an investigation into the death of Alexander James Davidson. The investigation concluded at the end of an inquest heard over two days on 4 and 5 March 2019. The conclusion of the inquest was that Alex died as a result of natural causes from: 1a. Multiple Organ Failure & Peritonitis 1b. Infected Pancreatic Pseudocyst (Operated) 1c. Gallstone Pancreatitis 2. Steatosis of the Liver; Ischaemic Bowel; Elevated BMI > 30kgm-2
4	**CIRCUMSTANCES OF DEATH** Alexander James Davidson was born in Sutton-in-Ashfield, Nottinghamshire, on 5 August 2000. He was aged 17 years and 6 months when he died at the Queens Medical Centre on 26 February 2018. Alex was previously fit and well before suddenly taking ill with abdominal pain on 17 January 2018. Between that date and his admission to the Queens Medical Centre on 8 February 2018, Alex made contact with his GP on three occasions, had four telephone triage assessments undertaken by the NHS 111 service and two admissions to his local Accident & Emergency Department at the Kingsmill Hospital,

	Mansfield. Alex's symptoms of sudden onset acute abdominal pain, tachycardia, and vomiting and diarrhoea were attributed either to stress or to a bout of gastroenteritis. At no stage prior to 8 February 2018 was gallstones or pancreatitis considered as a differential diagnosis. When Alex was eventually admitted to the Queens Medical Centre Emergency Department on 8 February 2018, he was found to be septic as a result of an infected and necrotic pancreatic pseudocyst, which had evolved as a complication of gallstone pancreatitis, a rare condition in someone of Alex's age. Despite medical intervention, Alex did not survive. The inquest explored the medical treatment and intervention that Alex received in the six weeks prior to his death. The medical evidence concluded that the pancreatic pseudocyst had likely formed by the time Alex began vomiting on 18 January 2018, and from that point onwards, it was unlikely he would survive even with treatment on account of the high mortality rate associated with this condition.
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) The NHS 111 telephone triage service uses the NHS Pathways computer system to triage patients via pre-determined question/answer based algorithms. The pre-determined questions are the same whether the caller is an adult or a child. Alex struggled to comprehend some of the medical terminology used during these calls. Call handlers are not permitted to deviate from the prescribed wording of the pre-determined questions, and this created confusion and inconsistency in the patient's answers. Consideration should be given as to how young and/or vulnerable patients can be assisted to provide accurate information about their symptoms. (2) The NHS Pathways algorithm for triaging vomiting and diarrhoea symptoms is unclear as patients may fail to understand what is meant by 'soil' or 'coffee ground' vomit. Consideration should be given to how this important diagnostic feature can be explored during telephone triage, especially when the patient is young and/or vulnerable. (3) The NHS 111 telephone triage service provides an electronic copy of the patient triage notes to the patient's GP within minutes of the call ending. There was a delay of 7 days in the GP surgery uploading the 111 triage document to Alex's patient record. This prevented Alex's GP from reviewing the triage note prior to his consultation with the patient. There is no guidance as to expected practise with regards to the timely updating of electronic patient records, and as a result delays are all too frequent. (4) Adults presenting to their GP or Emergency Department with abdominal symptoms receive a lipase and/or amylase blood test as part of the standard package of blood testing. The levels of each of these enzymes can be used to diagnose pancreatitis. Patients under the age of 18 years are not offered this testing as standard, on the basis that pancreatitis is rare in paediatric patients. I heard anecdotal evidence of some doctors at Kingsmill Hospital now add this test to the standard admission bloods for older teenage patients who present with non-specific abdominal symptoms but the NICE guidance (September 2018) is not explicit in this regard. I heard evidence as to the increasing prevalence of gallstone pancreatitis in young people, in line with an increase in childhood obesity. Consideration ought to be given to a national approach for lipase/amylase testing in young people with relevant symptoms. (5) Patients who make an unscheduled return to the Emergency Department within 72 hours of discharge are required to have a review undertaken by an ED Consultant, or a ST4 trainee or above in the absence of a Consultant on the 'shop floor': RCEM Guidance June 2016. Some hospitals will admit returning paediatric patients for observations but practise seems to vary doctor-to-doctor and across Trusts. Consideration ought to be given to a national approach.

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 action in relation to the above matters (in numerical order), as follows: (1) NHS Pathways (2) NHS Pathways (3) The Roundwood Medical Practice, NHS England (4) National Institute for Clinical Excellence (5) National Institute for Clinical Excellence
7	**YOUR RESPONSE** You are under a duty to respond to this report within 56 days of the date of this report, namely by 25 June 2019. 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** In addition to the organisations identified in section 6 above, I have sent a copy of my report to the Chief Coroner and to the following Interested Persons: Alex's family DHU111 (East Midlands) CIC Sherwood Forest Hospitals NHS Foundation Trust Care Quality Commission and to the Nottingham Safeguarding Children Board, as Alex was under the age of 18 years at the time of his death. I have also sent a copy to the Mansfield and Ashfield CCG and the Department of Health who may find it useful or of interest. I am also under a duty to send the Chief Coroner a copy of the responses received from the organisations listed in section 6 above. 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	2 May 2019 Signature_____ _____ Laurinda Bower, Assistant Coroner, **Nottingham City and Nottinghamshire**