	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS **THIS REPORT IS BEING SENT TO:** 1. North East Ambulance Service 2. [redacted] 3. General Chiropractic Council
1	**CORONER** I am Leila Benyounes, Assistant Coroner for the coronial area of Gateshead and South Tyneside
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 26/10/21 an investigation was commenced into the death of Joanna Daria Kowalczyk. The investigation concluded at the end of the inquest on 22/05/25. The conclusion of the inquest was: Joanna Kowalczyk died due to a combination of the consequences of chiropractic treatment following a naturally occurring medical event, on a background of an undiagnosed medical condition. The medical cause of death was: 1a) Bronchopneumonia 1b) Cerebella infarction 1c) Bilateral vertebral artery dissection 2) Unspecified connective tissue disorder (undiagnosed)
4	**CIRCUMSTANCES OF THE DEATH** The Deceased had a medical history which included migraine and joint hypermobility. It is likely that the Deceased had an unspecified connective tissue disorder which had not been diagnosed, and which made her susceptible to arterial dissections.

	On 26/09/21 the Deceased underwent a personal training session at a gym when she felt a crack to her neck whilst using a piece of gym equipment and developed a severe headache. It is likely that she sustained bilateral arterial dissections at this time. The Deceased attended the Emergency Department at hospital on 27/09/21 and there was clinical suspicion of a subarachnoid haemorrhage, so a CT scan of the head was undertaken. The scan did not identify a subarachnoid haemorrhage, and a lumbar puncture with admission to hospital was recommended to exclude this diagnosis, but the Deceased self-discharged prior to undergoing the lumbar puncture. The Deceased researched alternative treatments whilst waiting at hospital and identified chiropractic treatment. On 28/09/21 the Deceased attended an initial appointment with a chiropractor with a complaint of neck pain, where an assessment was undertaken, and she was diagnosed with acute severe cervical facet dysfunction and associated muscle dysfunction. Treatment in the form of adjustments and manipulation was recommended which the Deceased consented to. The Deceased informed the chiropractor that she had attended hospital and had undergone a CT scan and further investigations were advised, but she had self-discharged, and stated that the doctor was aware she was coming to see a chiropractor. The chiropractor did not obtain any medical records prior to carrying out treatment. The Deceased underwent the first adjustment and manipulation chiropractic session on 28/09/21 after which she felt some improvement in her neck pain. The Deceased underwent three further sessions with the chiropractor on 02/10/21, 09/10/21 and 16/10/21. During the fourth chiropractic session on 16/10/21, after the left adjustment to the neck, the Deceased experienced immediate symptoms of dizziness and room spinning. She developed double vision, tingling in her right hand and right foot, and was struggling to speak. The Deceased vomited whilst at the clinic. It is likely that the Deceased sustained acute dissections in the same location as the previous dissections during the chiropractic manipulation. The chiropractor had initial concerns that the Deceased was suffering from a stroke so performed a FAST test which was negative. The Deceased's symptoms began to improve, and she mobilised to a sofa in the treatment room to rest while the chiropractor sought a second opinion from a colleague. The Deceased remained in the chiropractic clinic for some hours resting. During that time, she was advised to seek medical attention at hospital by both chiropractors, but she did not wish to attend. An ambulance was not called by either chiropractor in reliance on the improvement in the Deceased's symptoms.

	The Deceased was unable to walk properly as she left the chiropractic clinic and required assistance from her partner. The chiropractor prepared a handwritten note advising the Deceased to go to A&E if any signs appeared. Those were the signs of stroke from the NHS website. As a result of speech difficulty reported during an emergency call, paramedics attended via blue light ambulance later that day and carried out an assessment of the Deceased, including a FAST test due to possible symptoms of stroke, which was negative. The attending paramedic was reassured by a telephone conversation with the treating chiropractor that symptoms of dizziness and migraine were normal after the chiropractic treatment. The attending paramedic was not aware that symptoms of stroke could stop after a short period of time and assessed the Deceased based on the Deceased's reported symptoms at that time. A diagnosis of migraine was reached by the paramedic from the reported history, the examination findings, and in reliance on the chiropractor's reassurance that the chiropractor had no concerns, with a recording of a pain score of 6/10. An information for healthcare professionals document was completed by the paramedic before leaving the scene which recorded dizziness symptoms and the Deceased could not open her right eye for a while. Like the previous day, the Deceased was unable to mobilise unaided and required assistance to mobilise from her partner, which was not observed or recorded by the attending paramedic. Had the paramedic observed and recorded the inability to mobilise unaided, the Deceased would have been assessed as FAST positive and transported to hospital on 16/10/21. On 17/10/21 paramedics attended the Deceased again via blue light ambulance at the highest priority. It was identified that the Deceased was gravely unwell with a reduced level of consciousness, and a FAST test to exclude stroke, could not be performed. A decision was made to transfer to the Emergency Department. The Deceased was unable to mobilise and required the use of a chair to be transported to the ambulance. The Deceased deteriorated in the ambulance on the way to hospital and required intubation and ventilation. A CT scan identified a maturing infarction involving the near entirety of the posterior fossa structures and a CT angiogram identified left vertebral artery dissection. Specialist advice was sought, and no treatment was available. The Deceased deteriorated and brain stem testing confirmed death at 13.10 on 19/10/21 at the Queen Elizabeth Hospital in Gateshead. Whilst it is possible that investigations undertaken on 16/10/21 either after attendance at hospital following the chiropractic treatment or following the attendance by paramedics, may have identified the dissection to one of the arteries which was subsequently identified on 17/10/21, this cannot be determined to the requisite standard of proof.

	It is not possible to determine whether earlier identification of the dissection on 16/10/21 would have allowed different management and treatment, so as to have changed the tragic outcome. An investigation undertaken by the ambulance service found that there was a failure in communications made by the paramedic crew on 17/10/21, but this did not cause or contribute to the death.
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 could 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 evidence from the attending paramedic was that she was not aware that symptoms of a stroke can stop after a short time as clearly set out on NHS website and guidance, and that this was not part of her training. This was directly contrary to the Head of Operations' evidence that this was part of both paramedic training and annual continuing professional development. This was a concerning feature given the accepted evidence of the time critical period to treat patients with symptoms potentially indicative of stroke. 2. The evidence on behalf of the treating chiropractor was that he did not consider it necessary to request GP records or hospital records, before assessment or treatment despite being informed about the Deceased's recent hospital attendance, investigation which was recommended, and her discharge against medical advice. Even in the updated consent form I have been provided with, which was designed by the British Chiropractic Association, there is no prompt or question designed for the chiropractor to ask to consider obtaining medical records before assessment or treatment, and when this may be appropriate, and the only reference to medical records is a consent to communicate as deemed necessary for the treatment, and for a report to be sent to the GP after treatment. I am concerned that consideration to obtaining medical records should always be given before assessment, particularly where recent medical treatment or investigations has been undertaken.
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 25 April 2024. 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: the Family of Joanna Kowalczyk and Gateshead Health 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	**LEILA BENYOUNES** **Assistant Coroner for Gateshead and South Tyneside** **22/01/25**