SHERIFFDOM OF TAYSIDE, CENTRAL AND FIFE AT STIRLING

[2025] FAI 18

STI-B95-23

DETERMINATION

BY

SHERIFF KEITH O'MAHONY

UNDER THE INQUIRIES INTO FATAL ACCIDENTS AND SUDDEN DEATHS ETC (SCOTLAND) ACT 2016

into the death of

GRAHAM ANDERSON

Stirling, 10 April 2025

Determination

The Sheriff, having considered all the evidence adduced and the joint minute of agreement, determines in terms of section 26 of the Inquiries into Fatal Accidents and Sudden Deaths etc. (Scotland) Act 2016 ("the Act") that:

1. **In terms of section 26(2)(a)** (when and where the death occurred) - that Graham Anderson, died on 1 May 2020. The precise time of death is unknown. Life was formally pronounced extinct at 1021 hours on that date. Mr Anderson's death occurred at CalaChem Limited, Earls Road, Grangemouth, FK3 8XG.

2. **In terms of section 26(2)(b)** (when and where any accident occurred resulting in the death) - no finding is made. The death was not the result of accident.

3. **In terms of section 26(2)(c)** (cause of death) – that the cause of death was

coronary artery atheroma and thrombosis.

4. **In terms of section 26(2)(d)** (cause of accident resulting in death) - no finding is made. The death did not result from accident.

5. **In terms of sections 26(2)(e)** (precautions which (i) could reasonably have been taken, and (ii) had they been taken might reasonably have resulted in the death being avoided) –

(a) Mr Anderson's death might have been avoided had the Advanced Paramedic Coordinator, Claire Goodfellow, telephoned the Remote Advanced Paramedic at the point of allocating Mr Anderson's case to him. That action would have alerted the Remote Advanced Paramedic to the need to triage Mr Anderson as soon as possible.

6. **In terms of section 26(2)(f)** (any defects in any system of working which contributed to the death or any accident resulting in the death):

(a) The triage system employed by the Scottish Ambulance Service required the Advanced Paramedic Coordinator to allocate a case to the Remote Advanced Paramedic for triage and thereafter to telephone the Remote Advanced Paramedic to advise them of that allocation. In the absence of a phone call the Remote Advanced Paramedic had no knowledge of the case. That system gave rise to the possibility of a case being allocated but the subsequent phone call not being made and the patient being overlooked.

(b) That system of working also gave rise to the possibility of the Advanced Paramedic Coordinator becoming overwhelmed by the duties being placed upon

them increasing the likelihood of the critical phone call to the Remoted Advanced Paramedic not being made.

7. **In terms of section 26(g)** (any other relevant facts) - makes no finding.

NOTE

Introduction

[1] An inquiry was held into the death of Graham Anderson, born on the 19th of May 1960. At the time of his death Mr. Anderson was employed as a stores assistant at CalaChem, Earls Road, Grangemouth. He had held this position for a number of months.

[2] Police Scotland reported Mr Anderson's death to the Crown Office and Procurator Fiscal Service on the 5th of May 2020. COPFS gave notice of their intention to hold an FAI on the 12th of June 2023.

[3] Preliminary hearings were held on the:-

- 28th of July 2023
- 26th of October 2023
- 15th of December 2023
- 24th of January 2024 and
- 13th of February 2024

[4] The court heard evidence on the:-

- 23rd of February 2024
- 22nd of March 2024

- 30th of September 2024 and
- 22nd of November 2024.

The court heard final submissions from parties on the 23rd of January 2025.

[5] Ms Webb, Procurator Fiscal Depute, represented the Crown. Mr Fraser, solicitor, represented the next-of-kin. Mr Rolfe, advocate, represented the Scottish Ambulance Service. Ms Smith, advocate, represented CalaChem Limited.

[6] The following witnesses gave evidence to the inquiry:

1. Graham Malcolm, Shift Operations Manager, CalaChem
2. Joshua Minor, Call Handler, the Scottish Ambulance Service
3. Claire Goodfellow, Advanced Paramedic, the Scottish Ambulance Service
4. Owen Lawson, Health and Safety Officer, CalaChem
5. Max Hawes, Paramedic, the Scottish Ambulance Service
6. Callum Johnston, Advance Practice Lead, the Scottish Ambulance Service
7. Alan Martin, Patient Experience Manager, the Scottish Ambulance Service
8. Stephanie Jones, Integrated Clinical Hub Manager, the Scottish Ambulance Service
9. Dr Andrew Flapan, Consultant Cardiologist

[7] I make no adverse findings in relation to the credibility or reliability of any witness. I am satisfied all witnesses were doing their best to assist the inquiry by recalling events which were, by then, four to five years old.

[8] In addition a joint minute of agreement was entered into by parties.

The Legal Framework

[9] The inquiry was held in terms of section 4(1) of the Inquiries into Fatal Accidents and Sudden Deaths etc (Scotland) Act 2016 on a discretionary basis. The Inquiry is governed by the Act of Sederunt (Fatal Accident Inquiry Rules) 2017.

[10] In terms of section 1(3) of the Act, the purpose of this Inquiry is to establish the circumstances of Mr Anderson's death and to consider what steps (if any) might be taken to prevent other deaths in similar circumstances.

[11] Section 26 of the Act sets out the matters to be covered in the determination. These include setting out findings on the following: (a) when and where the death occurred; (b) when and where any accident resulting the death occurred; (c) the cause or causes of the death; (d) the cause of causes of any accident resulting in the death; (e) any precautions which – (i) could reasonably have been taken, and (ii) had they been taken, might realistically have resulted in the death, or any accident resulting in the death, being avoided; (f) any defects in any system of working which contributed to the death or any accident resulting in the death; (g) any other facts which are relevant to the circumstances of the death. They also include setting out such recommendations (if any) in relation to: (a) the taking of reasonable precautions; (b) the making of improvements to any system of working; (c) the introduction of a system of working; (d) the taking of any other steps, which might realistically prevent other deaths in similar circumstances.

[12] The procurator fiscal represents the public interest in investigating, arranging and conducting an inquiry. It is not the purpose of an inquiry to establish civil or

criminal liability. Fatal Accident Inquiries are an inquisitorial and not an adversarial process.

[13] In the context of this inquiry section 26(2)(e) merits further consideration. Section 26(2)(e) sets out a two-stage test. Firstly, the court requires to be satisfied on the evidence that there was a precaution which could reasonably have been taken. Secondly, the court must be satisfied on the evidence that if the precaution in question had been taken, that it might realistically have avoided the death. Unless both criteria are met, no finding should be made in terms of section 26(2)(e).

[14] A finding as to a reasonable precaution whereby the death would have been avoided is not required. The wording of the provision instead refers to reasonable precautions which, if taken, might have resulted in the death being avoided. The explanatory notes to the 2016 Act provide that the use of the word "*reasonably*" relates to the reasonableness of taking the precaution rather than the foreseeability of the death or accident. They further provide that "*A precaution might realistically have prevented a death if there is a real or likely possibility, rather than a remote chance, that it might have done so.*" It follows, therefore, that certainty as to avoidance of death is not required.

Summary of Evidence

[15] The following facts were established in evidence and by joint minute of agreement:

1. Graham Anderson was born on the 19th of May 1960. Mr Anderson was employed as a stores assistant at CalaChem, Earls Road, Grangemouth by sub-

contractor Spectrum Service Solutions Ltd. He had held this position for approximately six months.

2. Mr Anderson's death occurred on the premises of CalaChem Ltd, Earls Road, Grangemouth on the 1st of May 2020. Life was formally pronounced extinct at 1021 hours that day.

Scottish Ambulance Service Triage System

3. The evidence disclosed a number of telephone calls involving the Scottish Ambulance Service (hereinafter referred to as the SAS). To assess the relevance and importance of these it necessary to have an understanding of the triage system then deployed by the SAS to prioritise cases referred to them.

4. As a consequence of the COVID pandemic the SAS introduced a new triage system in early 2020. This was a colour coded system designed to categorise cases according to severity and urgency. Amongst other things, the system was intended to prevent the unnecessary attendance of SAS staff at locations where the patient may be better diverted to other services. This aspect was of particular importance during the pandemic given the possibility of SAS staff becoming infected with COVID.

5. Stephanie Jones, Integrated Clinical Hub Manager for the SAS, and Callum Johnston, Advance Practice Lead for the SAS, both gave evidence about the establishment of a clinical hub and a new system of triage deployed during COVID. The system allowed remote consultations to take place. Advanced

Paramedic Coordinators (APC's) were introduced. The APC's were based within the control room which received the 999 calls. These consultations targeted primarily medical conditions with lower acuity and which were not immediately life threatening.

6. Ms Jones explained the colour coding used by the SAS as at May 2020: purple - the highest acuity with a greater than 10% chance of cardiac arrest; red – 1% to 9.9% percent chance of cardiac arrest; amber – a patient with a time critical pathway, for example a patient who has suffered a stroke; yellow – everyone else who requires an emergency response e.g. limb deformity; green/teal - a patient who may benefit from clinical interaction and assessment. Only those patients categorised as green/teal would be referred to the triage process.

7. The SAS call handler was tasked with selecting the 'chief complaint' reported by the caller after the completion of initial triage questions (e.g. is the patient breathing etc).

8. Those calls suitable for triage were shown as a "stack" of calls on a computer screen available to the APC. The APC then allocated the next waiting call to the next available Remote Advanced Paramedic (RAP) for the purposes of contacting that patient or those caring for the patient in order to triage them further. The RAP's were based all over Scotland. The RAP would then be notified of the allocation by the APC via a telephone call. It was therefore anticipated that the APC would electronically allocate the case to a particular RAP, following which the APC then phoned the RAP and provided all the

necessary case information. The RAP would then phone the patient and/or those caring for them to further triage. There was no restriction on the questions a RAP could ask a patient or those caring for the patient. Once the RAP had completed the further triage the RAP would contact the APC by phone to advise of the outcome. That outcome could involve changing the code to a different colour.

Events of 01 May 2020

9. Mr Anderson arrived at his place of work at around 0700 hours and was observed by a colleague, Sandra Phillips, who reported him as appearing fit and well at that time.

10. Sometime between 0750 hours and 0755 hours Sandra Phillips went into Mr Anderson's office and found him to be lying face down on the floor. She tried to roll him over and noted that he was very hot to the touch and his eyes were white. She telephoned 888. That was the site emergency telephone number that connected to the gatehouse and main reception on site[1]. Ms Phillips spoke to Alex Stewart (described as a security guard), who informed her that first responders would attend.

11. Within minutes, first responders, including Graham Malcolm, Operations Manager, and Andrew Hood attended on scene and attempted to assist

[1] During evidence this area was variously referred to as the control room, gatehouse, main reception and ECRO (Emergency Control Room Operator). For ease of understanding I shall simply refer to the area as the gatehouse.

Mr Anderson. Mr Malcolm gave evidence that on arrival Mr Anderson was conscious and talking but "*visibly and obviously unwell*". Mr Hood contacted the gatehouse and asked that an ambulance be summoned. It was the normal response to have the gatehouse contact the SAS. Mr Malcolm is trained in first aid. He stated that Mr Anderson was suffering from severe chest pain and pain down his arm and that "*without a shadow of a doubt he was having a heart attack*". Those in attendance did what they could to assist Mr Anderson including providing him with oxygen.

First Phone Call

12. At 07:57:00 the Scottish Ambulance Service (SAS) received a 999 phone call from Alex Stewart, at the CalaChem Plant at Grangemouth. This call was made from the gatehouse. Accordingly, the call was not being made by someone who was with Mr Anderson. This call was given the incident number 6466205 by the SAS. The audio recording and transcript were led in evidence[2].

13. Mr Stewart informed the call handler that Mr Anderson had collapsed having apparently passed out and that CalaChem had sent their own first responders to attend to Mr Anderson.

14. During the 999 call the following exchanges took place:-

[2] Crown label 1 and production 19 respectively refer.

"Call Handler – Okay. Now Tell me exactly what happened please?

Caller – I hon honestly don't know. I know he's collapsed."

And later:-

"Call Handler – Is his breathing completely normal?

Caller – I don't know.

Call Handler – Is he completely alert?

Caller – He wa…He eh I don't know that either.

Call Handler – Okay. Is he changing colour?

Caller – I don't know that either cause as I say I'm no with him."

15. The call handler also asked whether Mr. Anderson had a history of heart problems. No response was received to the question. Mr Stewart went on to provide the call handler with two telephone numbers for those who were in attendance with Mr Anderson.

Second Phone Call

16. During the next few minutes the SAS called at least one of those numbers on four separate occasions but each time it went to voicemail. At 08:03:38 Joshua Minor, an SAS call handler, successfully connected to one of those numbers and spoke to a person who was in attendance with Mr Anderson. Again, the recording was played and the transcript produced in evidence[3].

[3] Crown label 2 and production 20 respectively refer.

17. Mr Minor gave evidence. He is not clinically trained (which is not unusual). He has been employed as an emergency call handler with the SAS for fourteen years. The computer system which he and his colleagues use is known as the Medical Priority Dispatch System (MPDS). That system requires certain basic questions to be asked at the outset of every call. These include whether the patient is breathing and awake, what the address of the emergency is and asking for an explanation of exactly what happened.

18. The MPDS system allocates the further scripted questions to be asked based on the callers response to the initial questions. The MPDS system generates a priority level to the call and provides the advice which is to be given to the caller, where appropriate. The call handler is not permitted to deviate from the prescribed questions.

19. The call handler was told that Mr Anderson had been found lying on the floor unconscious but that he had regained consciousness; he was clammy; his breathing was slower, he was being given oxygen; and that he had no history of heart problems.

20. During that call there was no mention made of chest or arm pain nor any mention of the possibility that Mr Anderson may have suffered a heart attack.

21. On the basis of the information received by the call handler in the telephone call of 08:03:38 the SAS system computer system ultimately allocated a teal code to Mr Anderson's case. The call handler was not involved in allocating

that code which was done automatically by computer.

22. Mr Minor stated that had he been told that Mr Anderson was suffering from chest pain that would have given rise to a different set of questions and ultimately would likely have generated a different coding.

23. The allocation of a teal code meant (as per the triage system noted above) that no ambulance would be despatched and the case was referred to the APC for further triage.

24. At the end of the call the following exchange occurred:-

"Call Handler – That's fine now what am gonna do is get a clinical adviser to give you a call back to give you some further advice so is this

Male Voice – No problem

Call Handler – mobile the best number to get you back on is it?

Male Voice – Eh aye yes aye

Call Handler – That's fine so they'll call you on this number jus keep the line free for me if you can ok

Male Voice – Nae problem is there an ambulance en route (inaudible)

Call Handler – Well we're certainly gonna get we're certainly gonna get some help arranged for um

Male Voice – Right ok dokey

Call Handler – (inaudible) Jus need a little bit more information while we work out how best to help him so ma colleague'll do that for you shortly ok

Male Voice – Nae problem thank you

Call Handler – Anything changes in the meantime though just call us straight back on 999

Male Voice – Call you straight back certainly will ok doke

Call Handler – Ok thank you very much just now

Male Voice – Right nae problem thank you

Call Handler – Bye bye

Male Voice – Bye bye."

25. This call ended at 08:06:03 hours.

Initial APC Involvement

26. Claire Goodfellow was the APC on duty at the relevant time. At that time Ms Goodfellow was based in the South Queensferry Ambulance Control Room. She has been employed with the SAS since 2004, initially as a technician before becoming a technician and paramedic. She became a trainee advanced paramedic in 2019. In 2020 she was in the second year of her training and was asked to take on the role of APC along with other colleagues. She received one day of training in relation to the new triage system which she thought was in April 2020. She believed she had been in the role of APC for around 2 weeks before the death of Mr Anderson.

27. Ms Goodfellow was working a shift that day from 630am until approximately 6pm.

28. Ms Goodfellow gave evidence that confirmed the anticipated operation of

the triage system. The calls to be allocated for triage would display as a "*stack*", that is to say in a list, one on top of the other. The teal/green calls were not prioritised in 2020 (that has since changed) and were simply allocated on a first come, first served basis. RAP's could not see the stack. The only way a RAP would know a case had been allocated to them would be when the APC phoned to tell them.

29. Ms Goodfellow advised that her duties also included "*booking on*" fifteen to twenty advanced paramedics as available resources, receiving callbacks from already allocated jobs and thereafter changing the coding or closing the jobs down, booking the RAP's on and off meal breaks and providing additional clinical support and advice to the RAP's when requested. She stated the phone was constantly going but could not recall what the actual volume of work was like at the relevant time. She described being "*in and out of calls all the time*". She was unable to say how many calls per day were received but gave evidence that the telephone calls were constant all day. There was another APC working that day with whom she worked side by side. When one APC had to leave the control room the other APC would have responsibility for all the work coming into the control room.

30. She vaguely recalled seeing a call relating to Mr Anderson and believed this was quite early in the morning. She believed it made reference to him having fainted.

31. Computer records confirm that at 08:07:01 Ms Goodfellow accessed

Mr Anderson's event on the computer system. At 08:07:55 she checked what resources were available to allocate to the call. At 08:07:56 she allocated the call to a RAP on the computer system, Mr Colin Davidson. At 08:11:03 she exited the call.

32. Regrettably Ms Goodfellow did not follow up the allocation of Mr Anderson's case to the RAP with a telephone call, as is anticipated by the triage system. Accordingly, the RAP was unaware the case had been allocated to him. In effect this stopped all Scottish Ambulance Service management of Mr Anderson's condition. No ambulance had been despatched, nor had anyone been tasked with following up additional triage. Ms Goodfellow believed the failure to phone the RAP may be due to her receiving an unrelated call at the critical moment, or some other distraction, but could not be certain.

Third Phone Call

33. At 08:34:32, the SAS received a 999 phone call from a phone that was at the CalaChem Plant at Grangemouth[4]. This call was answered by a call handler, but the call failed with the caller unable to be heard.

Fourth Phone Call

34. At 08:34:51, the SAS received a 999 phone call from CalaChem made by

[4] Crown label 3 and production 21 respectively refer.

Alex Stewart, the same caller that made the first 999 call at 07:57:00. This call was given incident number 6466254. The call was led in evidence[5].

35. Mr Stewart advised that the purpose of the call was to ascertain an estimated time of ambulance arrival. The call handler stated she did not know as the call handlers are not provided with that information.

36. The following exchanges also occurred:-

"Call handler – Has there been a change in the patient's condition?

Caller – Ah don't know you'd need to phone the ah gave ye a mobile number there should be two mobile numbers there"

Later:-

"Call handler – OK Right is the patient awake?

Caller – The patient is awake just now yes

Call Handler – Ok ok an who does this number lead to?

Caller – It (inaudible) leads to a site operations manager."

37. It is clear from the terms of the call that those on site anticipated an ambulance was being or had been despatched.

Fifth Phone Call

38. At 08:36:31, the call handler from the SAS called the mobile number previously provided and spoke with one of those attending to Mr Anderson.

[5] Crown label 4 and production 22 respectively refer.

The call was produced in evidence[6].

39. The call handler asked if there had been any change in Mr Anderson's condition. She was informed there had not been any change.

40. The following exchange also occurred:-

"Male Voice – Eh the feeling o pains getting a wee bit less he said it wis aboot an 8 earlier its kinna come down to a 6

Call Handler – right ok so we are

Male Voice - Yeh

Call handler – we are comin (inaudible)

Male Voice (inaudible) Quite discomfort (inaudible)

Call handler – ok so I think (inaudible) is gonna call you back is that correct?

Male Voice – (inaudible)

Call Handler – a clinical advisor

Male Voice – uh they'd spoke to us about 35 minutes ago and said they were gonna try and get somebody out

Call Handler – right ok ok

Male Voice – Eh an just to keep this line free in case they had to phone back but they've no phoned back yet

Call Handler – Right ok so we are coming as quickly as we can ok we are just experiencing a high volume of calls ok but if he's cha please only call back if

[6] Crown label 5 and production 23 respectively refer.

there's a change in his condition."

41. Again, it is clear that those attending with Mr Anderson believe an ambulance is to be despatched or already has been. No doubt they remained under that impression given that the call handler states twice "*we are coming*". In fact they were not coming at all. At that point, the SAS were, as a matter of fact, doing nothing to manage Mr Anderson's condition nor directing any resources to him to ensure appropriate treatment. Moreover, I note that those with Mr Anderson are, for at least the second time, told not to phone again unless there is a change in Mr Anderson's condition.

42. On the evidence, these fourth and fifth telephone calls did not prompt any further action from the SAS. They were closed as 'duplicate' calls at 08:39:40.

APC Refers Call to RAP

43. Around an hour after the call had been allocated to a RAP Ms Goodfellow was approached by one of the control room managers, a Mr Steven Boyd, who had apparently noticed that the call had not been actioned.

44. At 09:10:16, (APC) Claire Goodfellow called (RAP) Colin Davidson[7].

45. The following exchange took place:-

"APC – Hi, I'm not sure if I gave you a patient but I'm meant to give you a patient on it a wee while ago, number 205

[7] Crown label 6 and production 24 respectively refer.

RAP – Naw no no no nut

APC – So sorry can I give you that patient?

RAP – 205?

APC – Yeah."

Later:-

"RAP – Yeah Grangemouth

APC – Yeah

RAP – That's great

APC – Eh let me check there's was a duplicate and I've stopped the duplicate or.

RAP - Yeah I seen that earlier on as a red. Was it a red come as a red

APC – Yeah that's maybe why I didn't give it to you. I can't remember what happened now there was a mobile number call yip. Call 254 was stopped as a duplicate of this call. Right this ones kept going. Ehm I meant to give it to you earlier so if you wouldn't mind giving them a quick call.

RAP – Yeah what's the name?

APC – Ehm it's Mr Graham an I think he's at a work environment in CalaChem Limited. If he needs an ambulance would you just give him a quick call an I'll do it straight away.

RAP – Yeah what was the problem with him?

APC – He's fainted apparently 59 year old gentleman who fainted.

RAP – Okay that's great

APC – Yeah if you come back to me ehm if he needs an ambulance cause I've

obviously forgot to pass you that so an I'll pop him up on the stack if he needs an ambulance

RAP – Yeah I'll go an do that now then."

46. From this point Mr Anderson comes back into the view of the SAS. Thus, the evidence discloses that for approximately one hour between 0810 and 0910 the Scottish Ambulance Service lost sight of Mr Anderson and did nothing to manage his need for treatment.

47. Reference was made in the conversation to a 'red call' which was possibly a duplicate call. The evidence clearly disclosed that if a call was coded as red it would not have found its way into the triage system on the 'stack'.
Ms Goodfellow gave evidence that the other call was likely showing as red because a question and answer session had not been completed and not because it had been assessed as 'red' in a clinical sense.

48. At 09:15:26, RAP Colin Davidson called APC Claire Goodfellow[8]. The following exchange occurred:-

"RAP – Could you it'll need to be a red call eh

APC – Alright

RAP – It's eh he was found collapsed blue he he regained consciousness but he's got a chest pain.

APC – Oh God. Right.

[8] Crown label 7 and production 25 refer.

RAP - Eh and his condition the first aider was there so he was saying he feels his conditions deteriorating jus now.

APC – Okay he's through he's through as red now.

RAP – An he's on oxygen jus now as well an the first aider's got him on ma oxygen."

49. The call was immediately upgraded to a red code and an ambulance was despatched.

50. That ended the involvement of Ms Goodfellow and Mr Davidson.

Sixth Phone Call

51. At 09:18:37, the SAS received a 999 phone call from a number associated with those responding to Mr Anderson at CalaChem[9]. This call was answered by call handler Miriam Hogg. This call was given incident number 6466351.

52. The caller stated he was phoning to report that Mr Anderson's condition had deteriorated. He had stopped breathing and a defibrillator had been used which had started his breathing again. He had lost consciousness twice. The caller reported that "*Times critical its aboot time he hud somebody here am afraid*". Towards the end of the call the ambulance arrived on site.

[9] Crown label 8 and production 26 refer.

Arrival of Ambulance

53. At 09:22:31 an ambulance arrived at the gatehouse. The ambulance crew consisted of qualified paramedic Max Hawes and qualified technician Mark Dunnachie. It took them a few minutes to get from the gatehouse to the building where Mr. Anderson was situated. On arrival there they required to don PPE equipment which also took a few minutes. By the time of their arrival Mr Anderson was in cardiac arrest. They took over CPR from the first responders and requested a second ambulance crew attend to assist them.

54. At 09:30:21 a second ambulance arrived at the gatehouse. The ambulance crew consisted of qualified paramedic Lauren Hamilton and student technician Kerry Lake.

55. The paramedics carried out advanced life support protocols including CPR. Regrettably their efforts were to no avail. At 1021 hours Mr Hawes and Ms Hamilton pronounced life extinct.

Cause of Death

56. A post mortem examination was conducted on the 8th of May 2020 by Dr Sally-Anne Collis, Consultant Forensic Pathologist, at Edinburgh City Mortuary. Dr Collis recorded the cause of death as coronary artery atheroma and thrombosis.

Significant Adverse Event Review

57. A Significant Adverse Event Review (SAER) was held by the Scottish Ambulance Service and a report dated the 27th of August 2020 was produced in evidence[10]. The terms of the report were spoken to by its author, Alan Martin, Patient Experience Manager with the Scottish Ambulance Service. Mr Martin has been Patient Experience Manager since January 2018. He previously held other roles within the SAS including that of paramedic. The undernoted paragraphs are summary of his evidence.

58. A SAER takes place where an adverse event occurs and there is a significant risk it will occur again. The process involves *inter alia* ingathering all the evidence, keeping next-of-kin informed, producing timelines and considering learning points. It was described as a reflective process. It is not a process designed to apportion blame.

59. Ultimately 7 recommendations were made all of which have now been implemented. In summary those recommendations were:-

- To carry out a workplace assessment of the control centre to ensure appropriate support is given and interruptions are minimised.
- To allocate a member of staff that is skilled in the use of the computer system to manage the non-clinical aspect of the system such as managing meal breaks.

[10] Crown production number 2.

- To consider an automated alert to notify the RAP's when they have been allocated a case.
- To review the record keeping in relation to triage processes.
- To engage with CalaChem in an attempt to support a review of their process when making emergency calls.
- To facilitate an educational session which would identify any specific learning needs carried out by out-of-hospital cardiac arrest service leads.
- To ensure that education on delivering bad news is available for all frontline staff.

60. As regards engagement with CalaChem, Mr Martin confirmed he had met with two members of their staff and tried to give support as to how they could enhance their process. He described the meeting as polite and said it was learning for CalaChem to take on board. Specifically he stated:-

> *"We need to triage. If they want an ambulance and can't tell us why it won't necessarily get the result they need. We understand the challenges they have but we are a finite resource…we need real-time accurate information on the patient"*

61. Mr Martin was cross examined by counsel for CalaChem in relation to a number of matters. In essence he disagreed with the suggestion put to him that the SAS had sufficient information to categorise the call as higher than the category which had been assigned. He also disagreed with the suggestion that the call handlers had incorrectly recorded information during the various

telephone calls. He could not say whether a different entry by the call handler at the material time would have led to a change in the code assigned to the case.

62. It was suggested to the witness that 'pain' had been reported to the call handlers but not recorded[11]. He highlighted that in the same call it had been reported that his condition had not worsened and further replied:-

> *"I don't agree with that statement in isolation. I discuss the duplicate call process in the SAER. The pain was not going through triage because it was a duplicate call. The call handlers follow a script utilised by ambulance services all over the world. "Tell me exactly what happened?" encourages that detail. They were able to get some of the detail but not all of it. It's emotive and emotional. We can't ask for every possible symptom for every condition. If we did then 999 calls would take forever."*

63. Mr Martin was asked about the possibility of a call handler going "*off script*" when dealing with a 999 call. He replied that this would create risk as it would introduce personal bias on the part of the call handler who may then ask the questions they want to ask rather than the most relevant questions.

Expert Evidence

64. The inquiry heard from Dr Andrew D Flapan who spoke to the terms of a report he had prepared dated the 1st of May 2021[12]. The report was instructed by

[11] Crown label 5 and production 23.
[12] Crown production 7.

the Scottish Fatalities Investigation Unit of Crown Office.

65. Dr Flapan is a consultant cardiologist and has been since 1994. His professional history includes many years of clinical practice throughout the UK and beyond. He has produced many publications and conducted research into cardiac failure, hypertension, psychological aspects of cardiac disease and heart disease. The court fully accepts Dr Flapan as expert in the medical matters concerning this inquiry.

66. Dr Flapan gave evidence regarding the introduction of the Optimal Reperfusion Service in Scotland, the aim being to provide the best reperfusion treatment for patients who are suffering from acute myocardial infarction. The steps in the process are as follows:-

- an Electrocardiogram (ECG) recording is taken at the scene by the SAS;
- the result is communicated to the Royal Infirmary of Edinburgh (RIE) to confirm diagnosis;
- if confirmed and the referral is accepted the patient is transported to the cardiac laboratory at the RIE.

67. On introduction of the service the target time for treatment following diagnosis by ECG was 120 minutes. This was reduced in 2018 to 90 minutes. In general terms, Dr Flapan advised that for all treatments following heart attack, the sooner treatment is delivered the better and that there is a gradient of the benefit of treatment as time passes. Nonetheless there could still be good reason

for performing the treatment beyond 120 minutes.

68. Specifically in relation to Mr Anderson, Dr Flapan explained that Mr Anderson's post-mortem examination showed that he had suffered an acute myocardial infarction. In those circumstances Mr Anderson would have been a candidate for treatment by optimal reperfusion and would have been considered for treatment by primary angioplasty.

69. Dr Flapan hypothesised a timescale for Mr Anderson's treatment. This involved:-

- the SAS arriving on scene within 8 minutes of first call;
- SAS time on scene – of 20 minutes;
- drive time to hospital – 30 to 40 minutes;
- door to balloon (angioplasty) – 10 to 15 minutes.

This gave a total time of around 85 minutes meaning that, if an ambulance had been despatched following first contact with the SAS, Mr Anderson would have arrived at hospital around the time of his cardiac arrest at 0920.

70. Dr Flapan was asked to speculate on the prospects of survival. Quite properly, in responding to those enquiries, Dr Flapan stated he was unable to be certain about any outcome. Specifically:-

- had Mr Anderson arrived at hospital prior to his cardiac arrest at approximately 9.20am, would he have been more likely than not to have survived? Dr Flapan stated that he would like to think so but there was certainly no guarantee. This is because once in the cardiac

laboratory at the RIE, Mr Anderson would have had the clinicians and equipment available to treat him thus increasing his chances of survival.

- The solicitor for the next-of-kin put a timing scenario that would have had Mr Anderson arrive at the Edinburgh hospital at 0915am.

  Dr Flapan agreed that Mr Andersons prospect of survival would have increased if he had arrived at hospital at that time. When asked if it was possible to put a figure on this, Dr Flapan explained this is difficult as cardiac arrests are complex and there are numerous factors out with the heart to consider. However, for those who suffer cardiac arrest in the laboratory there is a survival rate of over 80%.

Discussion and Conclusions

71. Parties lodged written submissions. I am grateful for their thoughtful nature. I have fully considered them.

72. The court has identified the following issues as central and significant to this inquiry:-

- CalaChem's process that emergency calls be placed from the gatehouse.
- The failure to notify the RAP following the 0803 phone call.
- The reasons for failing to notify the RAP.

I will deal with each of these in turn.

CalaChem's Process that Emergency Calls be Placed From the Gatehouse.

73. In submissions, the Crown invite a finding that CalaChem's medical assistance procedure – that a third and remote party place the initial call to the emergency services – was defective and contributed to Mr Anderson's death. The Crown argues that where there is a chain of communication then there is an inherent risk of miscommunication, loss of information and error. The Crown argue that the paucity of information given in the 0757 phone call to the SAS demonstrates that. Moreover, the Crown invite a recommendation that CalaChem review the emergency response procedure to consider how to eliminate the risks which have been highlighted in this case.

74. In relation to this procedure the inquiry heard evidence from Owen Lawson, the health and safety officer at CalaChem. He confirmed that CalaChem was (at that time) regarded as an 'upper tier' site in terms of the Control of Major Accident Hazards Regulations 2015 (COMAH). That 'upper tier' classification was triggered by the fact it was a facility that stored dangerous substances and meant CalaChem was subject to stringent legislative requirements and responsibilities which include detailed safety reporting, emergency planning, and ongoing inspection.

75. The court was referred to CalaChem's Internal Emergency Plan[13]. This

[13] Crown production 15.

was a detailed document which, *inter alia*, set out the pathway for CalaChem's response to a major accident or other significant emergency. It sets out that is the responsibility of the Emergency Control Room Operator to receive all 888 calls, to despatch an emergency response team and, if need be, to contact the emergency services. The ECRO will be advised by the emergency response team what the circumstances are and whether the emergency services should be contacted. Mr Lawson gave evidence that this allowed for a centralised response from the site and reduced scope for confusion. It allowed information to be ingathered and ensured communications remained disciplined. Having a streamlined response reduced the scope for human error.

76. Mr Lawson explained the use of an ECRO in communicating with emergency services was not unusual and was deployed by many other COMAH sites. The emergency plan was regularly reviewed. Regular simulations were held with the SAS, Police Scotland and the Local Authority. None of those agencies had questioned the use of the ECRO.

77. Mr Lawson was critical of Mr Stewart. As the ECRO he was the one who placed the call to the SAS after he had spoken with Sandra Phillips and Andrew Hood. It was possible and likely he could have provided more detail to the SAS.

78. I agree with counsel for CalaChem when she states that, on balance, it has not been established that this system of working contributed to the death. The system of working itself has clearly been thought through and is designed with the regulatory framework in mind. It has been rehearsed in drills and

successfully deployed in previous events. External stakeholders (police and the SAS etc) have not been critical of it. Its use in this case led to the phone call of 0757. The call lacked information but the evidence shows that was likely down to human fallibility rather than any failing in the system. Moreover, the next call involving the SAS was at 0803. That was with a person who was in attendance with Mr Anderson and was in a position to relay on-the-spot information. There was only a six-minute delay at that point. It would be a considerable and speculative leap for the court to conclude that a six-minute delay contributed to the death.

79. Moreover, I am not persuaded the recommendation suggested by the Crown would be appropriate. It would be a recommendation for review – not for positive change. It would not provide any certainty as to the court's view of that system of work. I note also that the system is and has been regularly reviewed (according to Mr Lawson's evidence) and was also further reviewed with CalaChem following the SAER.

<u>The Failure to Notify the RAP Following the 0803 Phone Call.</u>

80. I wish to record at this stage that I found Ms Goodfellow to be an honest and open witness. She was entirely candid as regards her involvement and made no attempt to conceal or dilute critical facts. She has an impressive history of employment with the SAS and throughout her professional career must have assisted many hundreds of people in medical emergency.

81. Any common sense reading of the evidence in this case confirms that the failure to notify the RAP following the allocation of Mr Anderson's case from the 'stack' was critical. It led to inaction for approximately one hour. I am satisfied on the basis of Dr Flapan's evidence that the one hour delay was highly significant. If an ambulance had been despatched at the first opportunity then, on Dr Flapan's hypothesis, it is possible that Mr Anderson would have been within a hospital setting by the time of the cardiac arrest at 0920am.

82. I am satisfied the two-stage test set out section 26(2)(e) is met and accordingly find that a reasonable precaution that might have avoided the death is if Ms Goodfellow had contacted the RAP upon allocation of Mr Anderson's case.

The Reasons for Failing to Notify the RAP

83. Ms Goodfellow gave evidence that she was likely distracted by something, possibly another call, and consequently failed to phone the RAP. The system of work at that time anticipated allocation of a case to the RAP at the same time as or followed by a phone call being made by the APC to the RAP. Again, as a matter of common sense, if that was reversed – phone call followed by allocation - then the phone call could not have been forgotten. The failure to stipulate the phone call should come first was a failing in the system of work at that time.

84. Ms Goodfellow gave evidence that her role as APC was demanding. Her

duties included booking the RAP's on and off the system, being a point of contact and support for the RAP's and arranging meal breaks for the RAP's. She described being in and out of telephone calls all the time. Of course, in addition to all of that the APC had the critical responsibility of allocating the calls for triage and following up by phoning the RAP's and alerting them to their allocations. This was a situation the Crown referred to as "*task overload*". In those circumstances it is perhaps hardly surprising that she was ultimately distracted from making one of her many phone calls timeously.

85. It cannot be precisely determined what led to the Ms Goodfellow being distracted from making the telephone call. Nonetheless, given that background, I am satisfied that the delay in making the phone call can be attributed to the multitude of tasks expected of the APC within that system of working and therefore contributed to the death.

Recommendations

86. The SAER led to considerable changes in the SAS system of work. The triage system has now moved far beyond what it was at the time of Mr Anderson's death. The changes implemented include:-

- The APC telephones the RAP before the case is allocated for triage.
- APC's have been moved to a different room within the control centre to reduce distractions.
- The introduction of another member of staff to manage the non-

clinical aspects of the system, such as booking RAP's on and off and managing meal breaks.

- Call recording for all clinicians.
- A priority queue for triage cases.

87. These new measures were implemented as a direct result of the circumstances leading to Mr Anderson's death. They are all measures which this court would have recommended had they not been voluntarily implemented. With that background there are no recommendations to be made.

88. I offer genuine and sincere condolences to the family of Mr Anderson. I recognise how difficult some aspects of the evidence must have been for them. I commend them for their dignity throughout this process.