4 TIME FROM FIRST SIGNS AND SYMPTOMS TO PRESENTATION

Initial symptoms

Determining the time from the onset of acute limb ischaemia (ALI) symptoms to the first presentation to any healthcare professional is challenging. It relies on the patient's recollection of events, the level of detail recorded in the medical history, and the combination of medical records that may be on more than one healthcare system. For the 283 patients where the reviewers were able to make an assessment, the median time from symptoms to presentation was 1.1 days (F4.1).

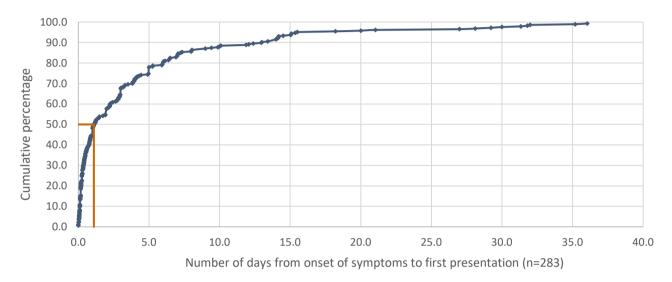


Figure 4.1 Time from onset of symptoms to first presentation to healthcare; n=283 Case review data

There were only 65/283 (22.9%) patients who presented within six hours of their symptoms starting. A further 38/283 (13.4%) patients presented between six and 12 hours and 36/283 (12.7%) between 12 and 24 hours (F4.2). Delays to presentation were common, with 144/283 (50.9%) patients presenting more than 24 hours after the onset of their symptoms. National data on delay to presentation would help target education and patient awareness campaigns.

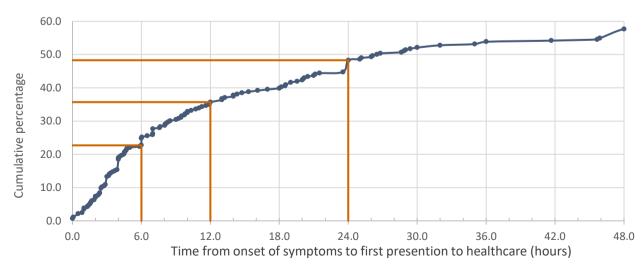


Figure 4.2 Time from onset of symptoms to first presentation to healthcare in hours; *n*=283 Case review data

When time to presentation was assessed against the Rutherford classification (in the vascular hub), 20/62 (32.2%) patients with a Rutherford IIb category first presented to healthcare within six hours and 43/62 (69.3%) presented within 24 hours (F4.3).

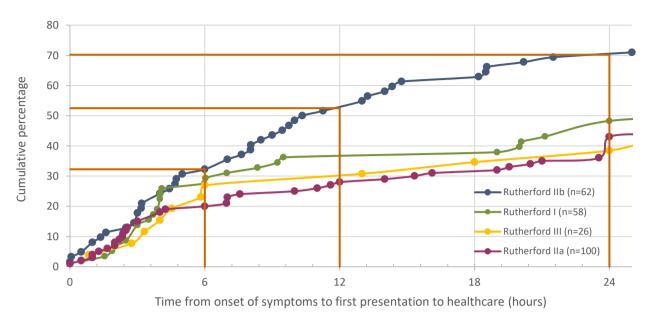


Figure 4.3 Time from onset of symptoms to first presentation to healthcare split by Rutherford category Case review data

The group of patients with a Rutherford IIa category presented later than those with Rutherford IIb. While it is unknown if the patient's limbs would have been salvageable had they presented earlier, improvements in limb salvage can only occur if there are opportunities to assess and treat earlier. This underscores the need for greater awareness and consideration of the symptoms of ALI.

NHS 111, whose advice algorithm directs patients to attend their local emergency department, was rarely used (or rarely recorded in the notes) (12/325; 3.7%) (T4.1) but when it was, the median time from onset of symptoms to contact with NHS 111 was 4.8 hours (F4.4).

Table 4.1 Healthcare provider that the patient first presented to	Number of patients	%
Self-presented to a vascular hub emergency department	83	25.5
Self-presented to a spoke hospital emergency department	79	24.3
999 call	69	21.2
Primary care	68	20.9
Presented at an outpatient clinic	14	4.3
NHS 111	12	3.7
Subtotal	325	
Unknown	5	
Total	330	

Case review data

Patients with ALI who self-presented to a spoke emergency department also had shorter median times to presentation (23.5 hours) than those who presented to a vascular hub emergency department (1.3 days) or primary care (1.9 days) (F4.4). All the groups varied widely with ranges from

less than six hours to one month. These differences may reflect the symptoms the patient was experiencing or the relative difficulties in accessing primary healthcare advice, while others may have delayed seeking medical advice due to a lack of awareness of the seriousness of their symptoms or other patient factors that affected their healthcare.

"I was on phone for ages to get GP appointment, then had to wait for my son to take me. I was in a lot of pain. Lots of waiting around and sent from one hospital to another. I didn't really know what was going on." Quote from the patient survey

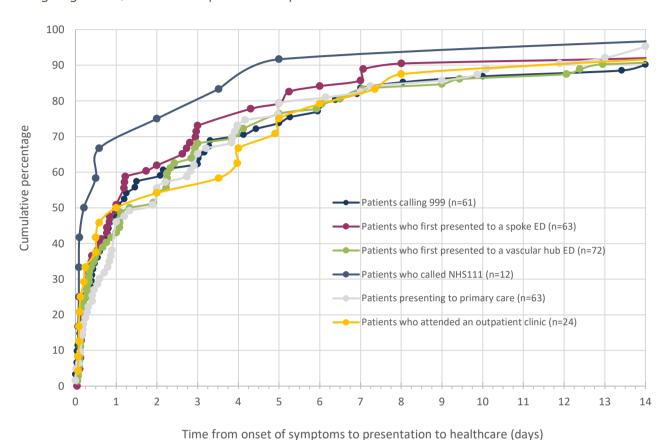


Figure 4.4 Time from onset of symptoms to first presentation to healthcare split by where the patient first presented

Case review data

In 60/330 (18.2%) sets of notes reviewers thought that patient factors delayed their presentation. The commonest reason was lack of patient awareness (25/60) with 'chaotic lifestyle', including not engaging with healthcare in 16/60 and vulnerability/mental health problems in 9/60. Four patients were also noted to have communication difficulties e.g. English as a second language. When patient factors delayed presentation the reviewers considered the outcome was more than likely affected for 11/60 patients.

There were missed opportunities to recognise ALI prior to admission, most commonly due to a lack of patient awareness (82/115; 71.3%) and/or recognition in primary care (24/115; 20.8%). The reviewers noted that there was also a missed opportunity to recognise ALI by NHS 111. These findings support a public and pre-hospital services awareness campaign, similar to that for stroke.