

[News story: Using AI in NHS diagnosis: apply for funding](#)

X-rays of arms and legs are among the most frequent diagnosis processes used by NHS Scotland, with around 5,000 procedures annually.

Although injuries in these areas are often categorised as minor, misdiagnosis and mismanagement can hamper recovery and lead to financial cost. However, the use of artificial intelligence (AI) and machine learning could help create systems that prevent misdiagnosis.

£240,000 is available through an Innovate UK Small Business Research Initiative (SBRI) competition, with funding from [Opportunity North East](#) and [NHS Scotland](#), to investigate the use of AI and machine learning in the NHS.

AI marks the spot

The competition will explore how AI and machine learning can be used to support limb radiographs in the diagnosis of fractures. Possible improvements include diagnosis accuracy and treatment and increased productivity in radiology departments.

Projects must use a dataset of peripheral limb X-rays and reports from the University of Aberdeen to develop AI algorithms that:

- interpret the current text-based report to correctly categorise fractures
- use radiograph images to identify the presence of fractures
- ensure the AI product can function at real-world accuracy

Successful applicants will be able to receive input from NHS Grampian, NHS Greater Glasgow and Clyde, the University of Aberdeen and Canon Medical Research Europe.

A 2-phase competition

The competition will comprise 2 phases. In phase 1, applicants will conduct technical feasibility studies on their proposed solution. Up to £100,000 including VAT is available in phase 1, and as many as 5 projects are expected to be funded.

Phase 2 will include prototype development and evaluation. Up to £140,000 including VAT is available at this stage.

Competition information