More than 6,000 people with diabetes have leg, foot or toe amputations every year in England. More people with diabetes could be saved from the threat of foot or leg amputation if they are referred more quickly to specialist clinics for less invasive – and potentially less expensive – medical alternatives like interventional radiology (IR), according to experts.

Speaking at the CIRSE (Cardiovascular and Interventional Radiological Society of Europe) annual congress - which is currently taking place at the SECC in Glasgow – one panel of specialists chose to focus on the huge potential of IR in transforming quality of life for people with diabetes.

Diabetes can put patients at particular risk of conditions affecting the feet (known as ‘diabetic foot’) causing nerve and blood vessel damage, loss of sensation and gangrene – making the condition a leading cause of lower limb amputation. In England around 6,000 people with diabetes undergo leg, foot or toe amputations annually.

But many people are now being helped through a cutting-edge medical specialty known as Interventional Radiology (IR) – where interventional radiologists use a range of imaging techniques, including X-Rays, CT and ultrasound, to guide small wires and catheters through blood vessels and other pathways in order to administer treatment. In people with diabetes it is a potentially limb-saving technique which can be used to widen and unblock arteries.

Professor Mike Edmonds is a diabetologist based at a multi-disciplinary diabetic foot clinic in King’s College Hospital, London, which gives patients access to a range of specialists from surgeons to radiologists.

He said: “In my view many amputations should simply not happen because the problems are detectable and potentially treatable. The good news is that we are making progress in this area, as there are now much better systems in place, and specialist clinics available across the UK.

“I came to CIRSE today with a patient who faced amputation of his leg – he was referred to the clinic and after an angiogram, bypass and skin grafts he no longer relies on a wheelchair or crutches. This man’s story is becoming more common and I want to see even more people benefitting from quicker referrals so that nobody has to face losing a limb if a timely referral to the right people means it can be avoided.”

A number of experts also believe there is a strong economic case for improving foot care for people with diabetes due to the high costs associated with ulceration and amputation. In England an estimated £639-£662m was spent on patient care in one year alone.
The cost of amputation also extends beyond the NHS, with costs to patients and their carers through lost working days and reduced mobility, and cost to the public purse through increased benefit payments and use of social care resources.

CIRSE – a non-profit society dedicated to medical advancement and education – believes that IR can potentially provide a less complication prone alternative to open surgery for patients.

It can mean shorter hospital stays, less risk, less pain and shorter recovery times.

In the majority of cases (nine out of ten) IR is performed using only local anaesthetic and sometimes sedation, most procedures (eight out of ten) require skin incisions of less than 5mm and eight out of ten patients even return home the same day.

Speaking alongside Professor Edmonds at today’s event were a range of other specialists including vascular surgeon, Professor Cliff Shearman, and IR specialist, Dr Trevor Cleveland.

Prof. Shearman agreed that timely referrals to specialists was a crucial factor in ensuring the best possible treatment for people with diabetes, and said better communication is key to helping more patients.

He said: “When it comes to care of patients with diabetes, a lot of people are involved across a range of expert areas – from podiatrists, district nurses and GPs through to hospital specialists, radiologists and surgeons – and the trouble is the service can often be fragmented meaning patients find it difficult to move from one part of the service to another.

“Think of it like a playing in a football team where you’ve never met the other players before, you haven’t decided what positions you’re going to play and you haven’t got a clear idea what the game’s about…that’s sometimes how diabetes care is at the moment.

“On a more positive note, we don’t need a lot of new technology to make improvements, we’ve got it, so we simply need better organisation and team working, and specialist diabetic foot clinics are proving to be a positive step in the right direction.”

Dr Cleveland showcased a range of cutting edge equipment in IR procedures including keyhole devices allowing for the arteries to be opened (and kept open) using metal stents and balloons delivering special drugs to the artery wall. Many such treatments can be offered as a day case procedure.

He said increasingly sophisticated equipment and less invasive treatment options were making a big difference to people with diabetes but believes other European countries including Germany and Italy were arguably ahead of the UK when it comes to making such treatment available.

He said: “Doctors in the UK look at a range of factors like quality of life and cost of amputation, based on the data available. I believe better collection and sharing of data on these kinds of procedures – with input from medical device manufacturers to doctors – will lead to them being used more widely.”

As well as being used in the treatment of diabetes, IR is used to treat a vast range of conditions ranging from uterine fibroids, bone tumours, lung cancer and stroke to deep vein thrombosis (DVT), hypertension, varicose veins and many more.